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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 224 and 226

[Docket No. 120815341-7866-01]

RIN 0648-BC45

Endangered and Threatened Wildlife and Plants: Proposed Rulemaking to Designate Critical Habitat for the Main Hawaiian Islands Insular False Killer Whale Distinct Population Segment

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: We, NMFS, propose to designate critical habitat for the Main Hawaiian Islands insular false killer whale (*Pseudorca crassidens*) distinct population segment by designating waters from the 45-meter (m) depth contour to the 3200-m depth contour around the main Hawaiian Islands from Niihau east to Hawaii, pursuant to section 4 of the Endangered Species Act (ESA). Based on considerations of economic and national security impacts, we propose to exclude the following areas from designation because the benefits of exclusion outweigh the benefits of inclusion and exclusion will not result in extinction of the species: The Bureau of Ocean Energy Management's Call Area offshore of the Island of Oahu, the Pacific Missile Range Facilities Offshore ranges (including the Shallow Water Training Range, the Barking Sands Tactical Underwater Range, and the Barking Sands Underwater Range Extension), the Kingfisher Range, Warning Area 188,

Kaula and Warning Area 187, Fleet Operational Readiness Accuracy Check Site Range, the Shipboard Electronic Systems Evaluation Facility, Warning Areas 196 and 191, and Warning Areas 193 and 194. In addition, the Ewa Training Minefield and the Naval Defensive Sea Area are precluded from designation under section 4(a)(3) of the ESA because they are managed under the Joint Base Pearl Harbor-Hickam Integrated Natural Resource Management Plan that we find provides a benefit to the Main Hawaiian Islands insular false killer whale. We are soliciting comments on all aspects of the proposal, including information on the economic, national security, and other relevant impacts. We will consider additional information received prior to making a final designation.

DATES: Comments must be received no later than 5 p.m. on [*insert date 60 calendar days after date of publication in the FEDERAL REGISTER*].

A public hearing will be held on December 7, 2017 at the Manoa Grand Ballroom, Japanese Cultural Center, 2454 South Beretania Street, Honolulu, HI 96826. Doors open at 6:00 p.m., and a presentation and hearing will begin at 6:30 p.m. Parking is available and will be validated.

ADDRESSES: You may submit comments, information, or data on this document, identified by NOAA-NMFS-2017-0093, and on the supplemental documents by either of the following methods:

Electronic Submission: Submit all electronic comments via the Federal eRulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2017-0093*, click the “Comment Now!” icon, complete the required fields, and enter or attach your comments.

Mail: Submit written comments to Susan Pultz, Chief, Conservation Planning and Rulemaking Branch, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1845 Wasp Blvd., Bldg. 176, Honolulu, HI 96818, Attn: MHI IFKW Critical Habitat Proposed Rule.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.*, name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. We will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT: Susan Pultz, NMFS, Pacific Islands Region, Chief, Conservation Planning and Rulemaking Branch, 808-725-5150; or Lisa Manning, NMFS, Office of Protected Resources 301-427-8466.

SUPPLEMENTARY INFORMATION

In accordance with section 4(b)(2) of the ESA (16 U.S.C. 1533(b)(2)) and our implementing regulations (50 CFR 424.12), this proposed rule is based on the best scientific information available concerning the range, biology, habitat and threats to the habitat of this distinct population segment (DPS). We have reviewed the information (*e.g.*, provided in peer-reviewed literature, and technical documents) and have used it to identify the physical and biological features essential to the conservation of this DPS. Background documents on the biology and the economic impacts of the designation, and

documents explaining the critical habitat designation process can be downloaded from http://www.fpir.noaa.gov/PRD/prd_mhi_false_killer_whale.html#fwk_esa_listing, or requested by phone or e-mail from the NMFS staff in Honolulu (area code 808) listed under “FOR FURTHER INFORMATION CONTACT”.

Background

On December 28, 2012, the main Hawaiian Islands (MHI) insular false killer whale (IFKW) (*Pseudorca crassidens*) DPS was listed as endangered throughout its range under the ESA (77 FR 70915; November 28, 2012). Under section 4 of the ESA, critical habitat shall be specified to the maximum extent prudent and determinable at the time a species is listed as threatened or endangered (16 U.S.C. 1533 (b)(6)(C)). In the final listing rule, we stated that critical habitat was not determinable at the time of the listing, because sufficient information was not currently available on the geographical area occupied by the species, the physical and biological features essential to conservation, and the impacts of the designation (77 FR 70915; November 28, 2012). Under section 4 of the ESA, if critical habitat is not determinable at the time of listing, a final critical habitat designation must be published 1 year after listing (16 U.S.C. 1533 (b)(6)(C)(ii)). The Natural Resources Defense Council filed a complaint in July 2016 with the U. S. District Court for the District of Columbia seeking an order to compel NMFS to designate critical habitat for the MHI IFKW DPS, and a court-approved settlement agreement was filed on January 24, 2017 (*Natural Resources Defense Council, Inc. v. Penny Pritzker, National Marine Fisheries Services*, 1:16-cv-1442 (D.D.C.)). The settlement agreement stipulates that NMFS will submit the proposed rule to the Office of the *Federal Register* by October 31, 2017, and the final rule by July 1, 2018. This

proposed rule describes the proposed critical habitat designation, including supporting information on MHI IFKW biology, distribution, and habitat use, and the methods used to develop the proposed designation.

The ESA defines critical habitat under section 3(5)(A) as: “(i) the specific areas within the geographical area occupied by the species, at the time it is listed..., on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed...upon a determination by the Secretary that such areas are essential for the conservation of the species.” (16 U.S.C. 1532(5)(A)). Conservation is defined in section 3(3) of the ESA as “...to use, and the use of, all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary...” (16 U.S.C. 1532(3)). Section 3(5)(C) of the ESA provides that except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species.

Section 4(a)(3)(B) prohibits designating as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DOD) or designated for its use, that are subject to an Integrated Natural Resources Management Plan (INRMP) prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species, and its habitat, for which critical habitat is proposed for designation. Although not expressly stated in section 4(b)(2), our regulations provide that critical habitat shall not be

designated within foreign countries or in other areas outside of U.S. jurisdiction (50 CFR 424.12 (g)).

Section 4(b)(2) of the ESA requires us to designate critical habitat for threatened and endangered species “on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat.” This section also grants the Secretary of Commerce (Secretary) discretion to exclude any area from critical habitat if he determines “the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat.” However, the Secretary may not exclude areas if this “will result in the extinction of the species.”

Once critical habitat is designated, section 7(a)(2) of the ESA requires Federal agencies to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify that habitat (16 U.S.C. 1536(a)(2)). This requirement is additional to the section 7(a)(2) requirement that Federal agencies ensure their actions are not likely to jeopardize the continued existence of ESA-listed species. Specifying the geographic location of critical habitat also facilitates implementation of section 7(a)(1) of the ESA by identifying areas where Federal agencies can focus their conservation programs and use their authorities to further the purposes of the ESA. Critical habitat requirements do not apply to citizens engaged in actions on private land that do not involve a Federal agency. However, designating critical habitat can help focus the efforts of other conservation partners (*e.g.*, State and local governments, individuals, and nongovernmental organizations).

This proposed rule describes information on the biology of this DPS, the methods used to develop the proposed designation, and our proposal to designate critical habitat for the MHI IFKW.

MHI IFKW Biology and Habitat Use

The false killer whale is a large social odontocete (toothed whales) in the family Delphinidae. These whales are slender-bodied with black or dark gray coloration, although lighter areas may occur ventrally between the flippers or on the sides of the head. A prominent, falcate dorsal fin is located at about the midpoint of the back, and the tip can be pointed or rounded. The head lacks a distinct beak, and the melon tapers gradually from the area of the blowhole to a rounded tip. In males, the melon extends slightly further forward than in females. The pectoral fins have a unique shape among the cetaceans, with a distinct central hump creating an S-shaped leading edge (Oleson *et al.*, 2010). The maximum size reported for a male is 610 centimeters (cm) (Leatherwood and Reeves 1983) and 506 cm for females (Perrin and Reilly 1984).

False killer whales are long-lived, mature slowly, and reproduce infrequently (Baird 2009, Oleson *et al.*, 2010). Maximum estimated age is reported at 63 years for females and 58 years for males (Kasuya 1986, Odell and McClune 1999). Females may live 10-15 years beyond their reproductively active years, based on estimates of senescence of around 45 years old (Ferreira 2008). This post-reproductive period is seen in other social odontocetes, such as short-finned pilot whales and killer whales, and may play a role in allowing these animals to pass knowledge important to survival from one generation to the next (McAuliffe and Whitehead 2005, Oleson *et al.*, 2010, Nichols *et al.* 2016, Photopoulou *et al.*, 2017).

Like other odontocetes, false killer whales have highly complex acoustic sensory systems through which they produce, receive, and interpret sounds to support navigation, communication, and foraging (Au 2000, Olsen *et al.*, 2010). Similar to bats – these animals use echolocation (or biosonar) to locate objects within their environment by producing sounds, and then receiving and interpreting the returning echoes. These animals also vocalize to communicate with one another, and passively listen to natural and biological acoustic cues from the ocean and other animals to understand their environment (Au 2000).

There are three categories of vocalizations that most odontocetes make, that support their ability to interpret the surrounding environment and to communicate with each other – echolocation clicks, burst-pulsed vocalizations, and whistles (Au 2000) (See the Vocalization, Hearing, and Underwater Sound section of the Draft Biological Report for generalized vocalization ranges for odontocetes, NMFS 2017a). Echolocation clicks (or click trains) and burst-pulsed sounds are sometimes described as a single category termed pulsed sounds/pulse trains (Murray *et al.*, 1998). Functionally, echolocation clicks support orientation and navigation within the whale's environment, while burst-pulsed sounds and frequency modulated whistles are social signals (Au 2000). False killer whales produce sounds that meet all three categories and sometimes produce sounds that are intermediate or between categories (Murray *et al.*, 1998). In addition to their dynamic vocalization capabilities, these whales can actively change their hearing sensitivity to optimize their ability to hear returning echoes or other sounds within their environment (Nachtigall and Supin 2008). Captive studies demonstrate false killer whales are able to perceive and distinguish harmonic combinations of sounds. This ability may facilitate

communication and coordination among false killer whales as they travel (Yuen *et al.*, 2007). Because vocalizations are a primary means of navigation, communication, and foraging, it is important that false killer whales are able to detect, interpret, and utilize acoustic cues within their surrounding environment.

The soundscape – referring to “all of the sound present in a particular location and time, considered as a whole” – varies spatially and temporally across habitats as the physical and biological attributes of habitats shift and the physical, biological, and anthropogenic factors that contribute to noise within that habitat change (Pijanowski *et al.*, 2011a, Pijanowski *et al.*, 2011b, Hatch *et al.*, 2016). For example, water depth, salinity, and seabed type affect how well sound propagates in a habitat, so the soundscape will vary as those attributes change. Additionally, the soundscape differs by the sources that contribute to noise within the environment; these sources may be from physical, biological, or anthropogenic noise. Physical sources of noise (such as rain, wind, or waves) and biological sources of noise (made by the biological community within that habitat) may vary over time as weather patterns change or behavioral activity varies. For example, summer storm activity or breeding activity may alter the soundscape at different points of the year. Human activities that contribute to noise within habitats can vary widely in frequency content, duration, and intensity; consequently, anthropogenic sound sources may have varied effects on a habitat, depending on how that sound is propagated in the environment and what animals use that habitat (Hatch *et al.*, 2016). Considering how human activities may change the soundscape and determining the biological significance of that change can be complex as it includes the consideration of many variables, such as the characteristics of human noise sources (e.g., frequency content,

duration, and intensity); the ability of the animal of concern to produce sound, receive sound, and adapt to other sounds within their environment; the physical characteristics of the habitat; the baseline soundscape; and how the animal uses that habitat (Shannon *et al.*, 2015, Hatch *et al.*, 2016, Erbe *et al.*, 2016). Noise with certain characteristics may cause animals to avoid or abandon important habitat, or can mask - or interfere with the detection, recognition, or discrimination of - important acoustic cues within that habitat (Gedamke *et al.*, 2016). In these cases, the duration of the offending or masking noise will determine whether the effects or degradation to the habitat may be temporary or chronic and whether such alterations to the soundscape may alter the conservation value of that habitat. Ultimately, noise with certain characteristics (*i.e.*, characteristics that can mask acoustic cues or deter MHI IFKWs) can negatively affect MHI IFKWs' ability to detect, interpret, and utilize acoustic cues within that habitat. Additional information about vocalization and hearing specific to false killer whales can be found in the Draft Biological Report (NMFS 2017a).

Under the Marine Mammal Protection Act (MMPA), we recognize and manage three populations of false killer whales in Hawaii: the MHI Insular (*i.e.*, IFKW), the Northwestern Hawaiian Islands, and the pelagic populations (Carretta *et al.*, 2016). The MHI IFKW is the only population of false killer whale protected under the ESA, because this population was found to meet the DPS Policy (61 FR 4722; February 7, 1996) criteria and was listed as endangered based on the DPS' high extinction risk and the insufficient conservation efforts in place to reduce that risk (77 FR 70915; November 28, 2012). Hereafter, we use "this DPS" synonymous with the MHI IFKW to refer to this endangered population.

Genetically distinct from the two other populations of false killer whales that overlap their range in Hawaii (Martien *et al.*, 2014), MHI IFKW are set apart from these and other false killer whales because they do not exhibit the pelagic and wide-ranging behaviors more commonly characteristic of false killer whales as a species. Instead, individuals of this DPS exhibit island-associated habitat use patterns, restricting their movements to the waters surrounding the main Hawaiian Islands (Oleson *et al.*, 2010; Baird *et al.*, 2012). With such a restricted range, this DPS relies entirely on the submerged habitats of the MHI for foraging, socializing, and reproducing. These behavior patterns may reflect in large part the unique habitat that the MHI offers in the middle of the Pacific basin. Specifically, the Hawaiian Islands are part of the Hawaiian-Emperor Seamount Chain; these submerged mountains disrupt and influence basin-wide oceanographic and atmospheric processes, and this disruption and influence, in turn, influence the productivity in the surrounding waters (Oleson *et al.*, 2010, Martien *et al.*, 2014, Gove *et al.*, 2016). Referred to as the “Island Mass Effect,” islands (land surrounded by water) and atolls (a ring-shaped reef, or grouping of small islands surrounding a lagoon) can create a self-fueling cycle where the geomorphic type (atoll vs. island), bathymetric slope, reef area, and local human impacts (*e.g.*, human-derived nutrient input) influence the phytoplankton biomass and the trophic-structure of the entire surrounding marine ecosystem (Doty and Oguri 1956, Gove *et al.*, 2016). As a result, in the center of the North Pacific Ocean the Hawaiian Islands create biological hotspots (Gove *et al.*, 2016), concentrating prey resources in and around different parts of the submerged island habitats. MHI IFKW behavioral patterns indicate that these whales are

employing a foraging strategy that focuses on the pelagic portions of the submerged habitats of the MHI.

Population Status and Trends

The 2015 Stock Assessment Report (SAR) provides the best estimate of population size for the MHI IFKW as 151 animals (CV=0.20) (Carretta *et al.*, 2016). This estimate relies on an open population model from 2006-2009 identified in the Status Review for the MHI insular stock and was reported as being a possible overestimate because it does not account for known missed matches of individuals within the photographic catalog (Oleson *et al.*, 2010). The minimum population estimate for the MHI IFKW is reported as 92 false killer whales, which is the number of distinctive individuals identified in photo identification studies from 2011-2014 by Baird *et al.* (2015) (Carretta *et al.*, 2016). A complete history of MHI IFKW status and trends is unknown; however, the Status Review and the 2015 SAR provide an overview of information that suggests that this DPS has experienced a historical decline (Oleson *et al.*, 2010, Carretta *et al.*, 2016).

Group Dynamics and Social Networks

As social odontocetes, false killer whales rely on group dynamics to support daily activities, including foraging; group structures also support these animals as they nurture young, socialize, and avoid predators. Studies in Hawaii indicate that MHI IFKWs are most commonly observed in groups (or subgroups) of about 10 to 20 animals; however, these groupings may actually be part of a larger aggregation of multiple subgroups that are dispersed over a wider area (Baird *et al.*, 2008, Reeves *et al.*, 2009, Baird *et al.*, 2010, Oleson *et al.*, 2010). Baird *et al.* (2008) describes these larger groups (of many

subgroups) as temporary, larger, loose associations of subgroups generally moving in a consistent direction and at a similar speed. These aggregations of subgroups may allow these whales to effectively search a large area for prey and converge when one sub-group locates a prey source (Baird 2009). Yuen *et al.* (2007) notes that this species' capacity to distinguish and produce different combinations of sounds may play an important role in facilitating coordinated movements of subgroups and maintaining associations over wide areas.

This DPS demonstrates social structure; observations from field studies indicate that uniquely identified individuals associate and regularly interact with at least one or more common individuals (Baird 2009, Baird *et al.*, 2010). Evidence from photo-identification and tracking studies suggests that somewhat stable bonds exist among individuals, lasting over periods of years (Baird *et al.*, 2008, Baird *et al.*, 2010). Further, genetic analyses of this DPS also suggest that both males and females exhibit philopatry to natal social clusters (meaning these animals stay within their natal groups), and that mating occurs both within and between social clusters (Martien *et al.*, 2011).

Social network analyses once divided the DPS into three broad social clusters based on these connections (Baird *et al.*, 2012). However, increased information from field studies indicates more complexity in these social connections, and a fourth social cluster has been identified (Robin Baird, pers. communication October 2016 and June 2017). Older analyses (before 2017) may only identify Clusters 1, 2, and 3; however, newer analyses will introduce information about Cluster 4.

Range

MHI IFKWs are found in the waters surrounding each of the main Hawaiian Islands (Niihau east to Hawaii). At the time of the ESA listing (2012) the range of the MHI IFKW DPS was described consistent with the range identified in the 2012 SAR under the MMPA as nearshore of the main Hawaiian Islands out to 140 kilometers (km) (approximately 75 nautical miles) (77 FR 70915; November 28, 2012; Carretta *et al.*, 2013). New satellite-tracking data has since proved the range to be more restricted than that of the 2012 SAR description, especially on the windward sides of the islands (Bradford *et al.*, 2015). NMFS revised the MHI IFKW's range in the 2015 SAR, under the MMPA (Carretta *et al.*, 2016), in accordance with a review and reevaluation of satellite tracking data by Bradford *et al.* (2015).

Overall, tracking information from 31 MHI IFKWs (23 from Cluster 1, and 8 from Cluster 3) suggests that the DPS has a much smaller range than previously thought, and that the use of habitat is not uniform around the islands (Bradford *et al.*, 2015). Specifically, MHI IFKWs show less offshore movement on the windward sides of the islands (maximum distance from shore of 51.4 km) than on the leeward sides of the islands (maximum distance from shore of 115 km). Acknowledging that the available tracking information has a seasonal bias (88.6 percent collected from August through January) and that data were lacking from Clusters 2 and 3, Bradford *et al.* (2015) set goals to refine the range in a manner that would reflect known differences in habitat use and allow for uncertainty in spatial and seasonal habitat use. The MHI IFKW's range was derived from a minimum convex polygon of a 72-km radius (~39 nautical miles) extending around the Main Hawaiian Islands, with the offshore extent of the radii connected on the leeward sides of Hawaii Island and Niihau to encompass the offshore

movements within that region (see Figure 1). Since this analysis, a single individual from Cluster 2 and several more individuals from Cluster 3 were tagged; tracking locations received from these animals are contained within the revised boundary established by the 2015 SAR (Carretta *et al.*, 2016; Baird, pers. communication November 7, 2016).

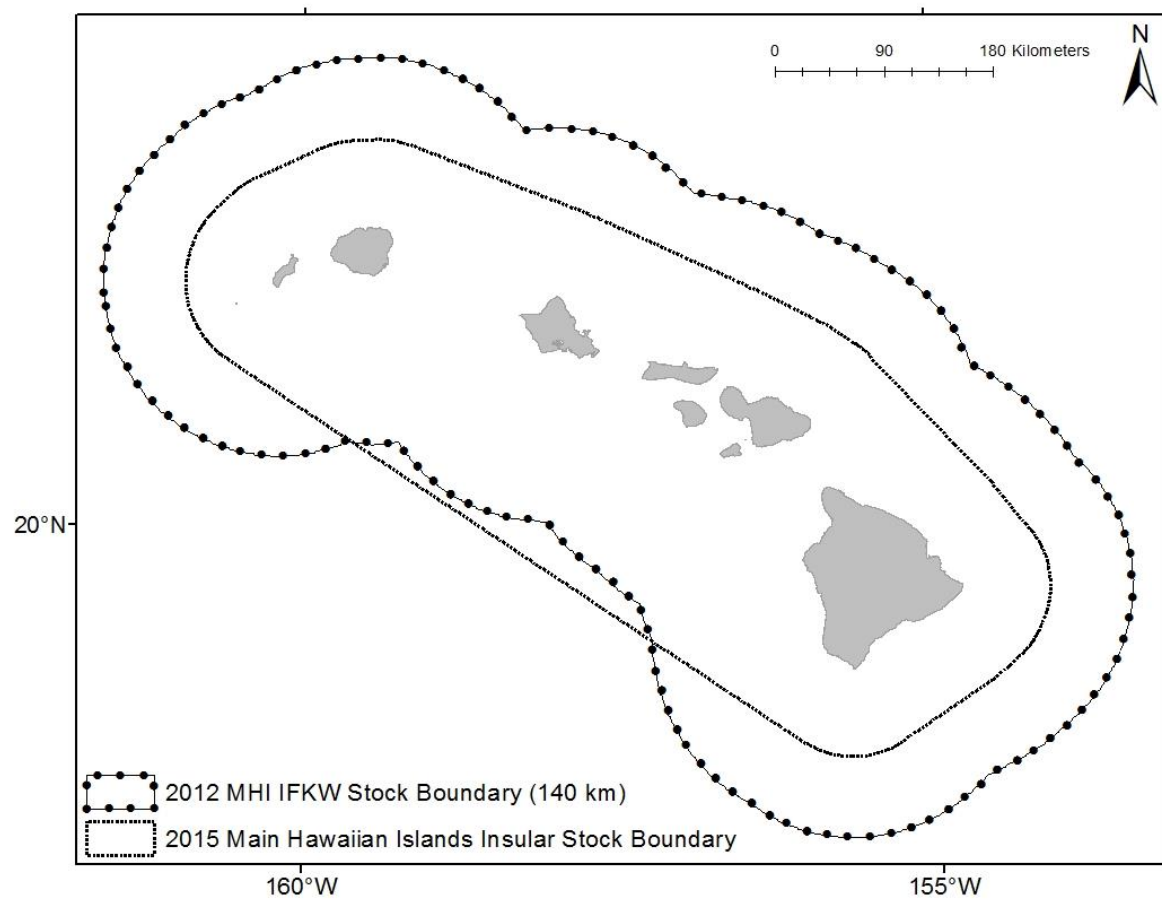


FIGURE 1. Map Depicting the 2012 and Current Stock Boundary for MHI IFKWs.

Movement and Habitat Use

As noted earlier, MHI IFKW's constitute an island-associated population of false killer whales that restrict their movement and foraging to waters surrounding the main Hawaiian Islands (Baird *et al.*, 2008, Baird *et al.*, 2012). Within these waters, generally, this DPS is found in deeper areas just offshore, rather than the shallow nearshore habitats used by island-associated spinner or bottlenose dolphins (Baird *et al.*, 2010). Within these deeper waters, MHI IFKW's circumnavigate the islands and quickly move throughout their range (Baird *et al.*, 2008, Baird *et al.*, 2012). For example, one individual moved from Hawaii to Maui to Lanai to Oahu to Molokai, covering a minimum distance of 449 km over a 96-hour period (Baird *et al.*, 2010, Oleson *et al.*, 2010). Overall tracking information demonstrates that individuals generally spent equal amounts of time on both leeward and windward sides of the islands; however, these animals exhibit greater offshore movements on the leeward sides of the islands, with reported distances as far as 122 km from shore (Baird *et al.*, 2012).

Baird *et al.* (2012) applied density analyses to tracking data to help distinguish significant MHI IFKW habitat areas and explored environmental characteristics that may define those areas. High-use areas for this DPS were described as the north side of the island of Hawaii (both east and west sides), a broad area extending from north of Maui to northwest of Molokai, and a small area to the southwest of Lanai. Habitat use appeared to vary based on social cluster. For example, the area off the north end of Hawaii was a high-use area only for individuals from Cluster 1, whereas the north side of Molokai was primarily high-use for Cluster 3 animals (Baird *et al.*, 2012). Updates to this analysis, using newly available tracking information, indicate that high-use areas may extend

further towards Oahu and into the channel between Molokai and Oahu (see the Draft Biological Report for a map of these areas and the updated information provided by Cascadia Research Collective). Due to the small and resident nature of this DPS, these high-use areas meet the definition of “biologically important areas” as established by NOAA’s CetMap program, and are used to highlight areas that can assist resource managers with planning, analyses, and decisions regarding how to reduce adverse impacts to cetaceans resulting from human activities (Baird *et al.*, 2015, Gedamke *et al.*, 2016).

Baird *et al.* (2012) compared physical and oceanographic characteristics of IFKW high-use and low-use areas of the range. Generally, they found that MHI IFKW high-use areas were on average shallower, closer to shore, and had gentler slopes compared to other areas of this DPS’ range. Additionally, these areas had higher average surface chlorophyll-a concentrations (compared to low-use areas), which may be indicative of higher productivity. Baird *et al.* (2012) suggested that high-use areas may indicate habitats where IFKWs have increased foraging success and may be particularly important to the conservation of this DPS. Still, the data set was limited, and more high-use areas may be identified as information is gained from all social clusters and for all months of the year.

Recent information suggests that estimated maximum dive depths once reported at 500 m (Cummings and Fish 1971) and later reported in excess of 600-700 m (Olsen *et al.*, 2010, Minamikawa *et al.*, 2013) may be underestimates for this species. This new information from tagged MHI IFKWs indicates that these animals are capable of diving deeper than reported earlier. Data received from depth-transmitting LIMPET (Low

Impact Minimally Percutaneous Electronic Transmitter) satellite tags on four MHI IFKWs (3 from Cluster 3, and 1 from Cluster 1) demonstrate a maximum dive depth of 1,272 m, with maximum dive durations reported as 13.85 minutes (Baird, pers communication, March 2017). Looking at information from all four animals, average maximum dive depths were similar during the day and night (912 m and 1,019 m respectively). The data demonstrate that these animals are diving greater than 50 m about twice as often during the day (0.72 dives/hour) than at night (0.35 dives/hour) (Baird pers communication, March 2017). In summary, limited data (from four individuals tagged in 2010 during the months of October and December) still indicate that a majority of foraging activity happens during the day, but that some nighttime activity also includes foraging.

Diet

Literature on false killer whales indicates the species eats primarily fish and squid (Oleson *et al.*, 2010, Ortega-Ortiz *et al.*, 2014, Clarke 1996). This DPS' restricted range surrounding the Hawaiian Islands is a unique ecological setting for false killer whales. Accordingly, the foraging strategies and prey preferences of this DPS likely differ somewhat from that of their pelagic counterparts (Oleson *et al.*, 2010). Still, studies examining the diet of this DPS suggest that pelagic fish and squid remain primary prey targets. Table 2 of the Draft Biological Report provides a list of prey species identified from field observations and stomach content analyses, as well as potential prey species determined from depredation data of the longline fisheries; this list includes large pelagic game fish, including dolphinfish (mahi-mahi), wahoo, several species of tuna, and marlin (NMFS 2017a).

Little is known about diet composition, prey preferences, or potential differences between the diets of MHI IFKW's of different age, size, sex, or even social cluster, and different methodologies create different biases about common prey items. From field studies, Baird *et al.* (2008) reports dolphinfish (mahi-mahi) as the most commonly observed prey, among other pelagic species reported. However, observations are limited to those foraging events where MHI IFKW's are found at or near the water's surface. In comparison, stomach content analysis from five MHI IFKW's that stranded off the Island of Hawaii (from 2010-2016) indicates that squid may play an important role in the diet along with other pelagic fish species (West 2016). Notably, data from stomach content analyses are from 5 whales identified as part of social Cluster 3, and it is unknown if this information may reflect differences in foraging preferences or strategy between social clusters, or if the relative health of these individuals may have influenced prey consumption just prior to death. Tracking information and observational data demonstrate that social clusters may preferentially use some areas of the range over others. For example, Cluster 2 individuals are seen more often than expected off the Island of Hawaii, and differences were noted between the preferences of Clusters 1 and 3 for certain high-use areas (Baird *et al.*, 2012). However, without additional data, it is difficult to know if these differences in habitat use may also reflect subtle differences in prey preference.

The Status Review determined the energy requirements for the IFKW DPS based on a model developed by Noren (2011) for killer whales (Oleson *et al.*, 2010). Using the best population estimate of 151 animals from the recent SAR, this DPS consumes approximately 2.6 to 3.5 million pounds (1.2 to 1.6 million kilograms) of fish annually,

depending on the whale population age structure used (see Oleson *et al.*, 2010 for calculation method) (Brad Hanson, NMFS Northwest Fisheries Science Center (NWFSC), pers. communication 2017).

As noted above, the Hawaiian Islands create biological hotspots that aggregate species at all trophic levels, including pelagic fish and squid (Gove *et al.*, 2016, Bower *et al.*, 1999, Itano and Holland 2000). In the same way that false killer whales exploit the resources of these islands, some large pelagic fish and squid also demonstrate island-associated patterns utilizing island resources and phenomena to support foraging or breeding activities (Bower *et al.*, 1999, Itano and Holland 2000, Seki *et al.*, 2002). Examples include: several species of squid that show increased spawning near the MHI to take advantage of higher productivity regions (Bower *et al.*, 1999); yellowfin tuna in Hawaii that appear to exhibit an island-associated, inshore-spawning run, peaking in the June-August period (Itano and Holland 2000); and eddies created by the influence of the islands that are known to concentrate prey resources of larger game fish (Seki *et al.*, 2002). Understanding the geographic extent and temporal aspects of overlap with prey species that demonstrate these island-associated patterns may provide further insight into factors that influence the diet of this DPS. Most of the species identified in Table 2 of the Draft Biological Report (NFMS 2017a) are species that are pelagic in nature, but that are found year-round in Hawaii's waters. Distribution of these large pelagic fish varies with seasonal changes in ocean temperature (Oleson *et al.*, 2010). Scrawled filefish and the threadfin jack are commonly associated with reef systems but are also found in the coastal open water areas surrounding Hawaii (Oleson *et al.*, 2010). Without further information about prey preferences, it is difficult to determine where prey resources of

higher value exist for this DPS. However, foraging activities likely occur throughout the range, as this species takes advantage of patchily distributed prey resources.

Critical Habitat Identification

In the following sections, we describe the relevant definitions and requirements in the ESA and our implementing regulations, and the key information and criteria used to prepare this proposed critical habitat designation. In accordance with section 4(b)(2) of the ESA and our implementing regulations at 50 CFR part 424, this proposed rule is based on the best scientific data available.

To assist with identifying potential MHI IFKW critical habitat areas, we convened a critical habitat review team (CHRT) consisting of five NMFS staff with experience working on issues related to MHI IFKWs and Hawaii's pelagic ecosystem. The CHRT used the best available scientific data and its best professional judgment to: (1) determine the geographical area occupied by the DPS at the time of listing, (2) identify the physical and biological features essential to the conservation of the species, and (3) identify specific areas within the occupied area containing those essential physical and biological features. The CHRT's evaluation and recommendations are described in detail in the Draft Biological Report (NMFS 2017a). Beyond the description of the areas, the critical habitat designation process includes two additional steps: (4) identify whether any area may be precluded from designation because the area is subject to an Integrated Natural Resources Management Plan (INRMP) that we have determined provides a benefit to the DPS, and (5) consider the economic, national security, or any other impacts of designating critical habitat and determine whether to exercise our discretion to exclude any particular areas. These consideration processes are described further in the Draft ESA

Section 4(b)(2) report (NMFS 2017b), and economic impacts of this designation are described in detail in the draft Economic Report (Cardno 2017).

Physical and Biological Features Essential for Conservation

The ESA does not specifically define physical or biological features; however, court decisions and joint NMFS-USFWS regulations at 50 CFR 424.02 (81 FR 7413; February 11, 2016) provide guidance on how physical or biological features are expressed.

Physical and biological features support the life-history needs of the species, including but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic needed to support the life history of the species.

Based on the best available scientific information, the CHRT identified specific biological and physical features essential for the conservation of the Hawaiian IFKW DPS, to include the following:

- (1) *Island-associated marine habitat for MHI insular false killer whales.*

MHI IFKWs are an island-associated population of false killer whales that relies entirely on the productive submerged habitats of the main Hawaiian Islands to support all of their life-history stages. Adapted to an island-associated foraging strategy and ecology,

these whales are generally found in deeper waters just offshore, moving primarily throughout and among the shelf and slope habitat on both the windward and leeward sides of all the islands. These areas offer a wide range of depths for IFKW's to travel, forage, and move freely around and between the main Hawaiian Islands.

(2) *Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth.*

MHI IFKW's are top predators that feed on a variety of large pelagic fish as well as squid. Within waters surrounding the main Hawaiian Islands, habitat conditions that support the successful growth, recruitment, and nutritional quality of prey are necessary to support the individual growth, reproduction, and development of MHI IFKW's.

(3) *Waters free of pollutants of a type and amount harmful to MHI insular false killer whales.*

Water quality plays an important role as a feature that supports the MHI IFKW's ability to forage and reproduce free from disease and impairment. Biomagnification of some pollutants can adversely affect health in these top marine predators, causing immune suppression, decreased reproduction, or other impairments. Water pollution and changes in water temperatures may also increase pathogens, naturally occurring toxins, or parasites in surrounding waters. Environmental exposure to these toxins may adversely affect their health or ability to reproduce.

(4) *Habitat free of anthropogenic noise that would significantly impair the value of the habitat for false killer whales' use or occupancy.*

False killer whales rely on their ability to produce and receive sound within their environment to navigate, communicate, and detect predators and prey. Anthropogenic

noise of a certain level, intensity, and duration can alter these whales' ability to detect, interpret, and utilize acoustic cues that support important life history functions, or can result in long-term habitat avoidance or abandonment. Long-term changes to habitat use or occupancy can reduce the benefits that the animals receive from that environment (*e.g.*, opportunities to forage or reproduce), thereby reducing the value that habitat provides for conservation. Habitats that support conservation of MHI insular false killer whales allow these whales to employ sound within their environment to support important life history functions.

NMFS has coordinated with numerous federal agencies on this essential feature. As a result, NMFS is seeking additional relevant information to assist us in evaluating whether it is appropriate to include "habitat free of anthropogenic noise that would significantly impair the value of the habitat for false killer whales' use or occupancy" as a feature essential to the conservation of MHI IFKWs in the final rule and, if so, what scientific data are available that would assist action agencies and NMFS in determining noise levels that result in adverse modification or destruction, such as by inhibiting communication or foraging activities, or causing the abandonment of critical habitat areas (see Public Comments Solicited). If we determine that a noise essential feature is not appropriate, we will update the economic analysis and any other relevant documents accordingly.

Geographical Area Occupied by the Species

One of the first steps in the critical habitat revision process was to define the geographical area occupied by the species at the time of listing and to identify specific areas, within this geographically occupied area, that contain at least one of the essential

features that may require special management considerations or protection. As noted earlier, the best available information indicates that the range of this DPS is smaller than identified at the time of listing (77 FR 70915, November 28, 2012; Bradford *et al.*, 2015). After reviewing available information, the CHRT noted, and we agree, that the range proposed by Bradford *et al.* (2015), and recognized in the 2015 NMFS Stock Assessment Report, provides the best available information to describe the areas occupied by this DPS, because this range includes all locations tagged animals have visited in Hawaii's surrounding waters and accommodates for uncertainty in the data (see *Range* above). Therefore, the area occupied by the DPS is the current range shown in Figure 1 and identified in the 2015 SAR, which includes 188,262 km² (72,688 mi²) of marine habitat surrounding the MHI (Carretta *et al.*, 2016).

To be eligible for designation as critical habitat under the ESA's definition of occupied areas, each specific area must contain at least one essential feature that may require special management considerations or protection. To meet this standard, the CHRT concluded that false killer whale tracking data would provide the best available information to identify habitat use patterns by these whales and to recognize where the physical and biological features essential to their conservation exist. Cascadia Research Collective provided access to MHI IFKW tracking data for the purposes of identifying critical habitat for this DPS. Due to the unique ecology of this island-associated population, habitat use is largely driven by depth. Thus, the features essential to the species' conservation are found in those depths that allow the whales to travel throughout a majority of their range seeking food and opportunities to socialize and reproduce.

One area has been identified as including the essential features for the MHI IFKW DPS; this area ranges from the 45-m depth contour to the 3200-m depth contour in waters that surround the main Hawaiian Islands from Niihau east to the Island of Hawaii (see the draft Biological Report for additional detail). As noted above, MHI IFKWs are generally found in deeper areas just offshore, rather than shallow nearshore areas (Baird *et al.*, 2010). MHI IFKW locations were used to identify a nearshore depth at which habitat use by MHI IFKWs may be more consistent. Specifically, at depths less than 45 m MHI IFKW locations are infrequent (less than 2 percent of locations are captured at these depths), and there does not appear to be a spatial pattern associated with these shallower depth locations (*i.e.*, locations were not clumped in specific areas). The frequency of MHI IFKW locations increases at depths greater than 45 m and appears to demonstrate more consistent use of marine habitat beyond this depth. The 45-m depth contour was selected to delineate the inshore extent of areas that would include the essential features for MHI IFKWs based on these patterns in the IFKW data.

An outer boundary of the 3200-m depth contour was selected to incorporate those areas of island-associated habitat where MHI IFKWs are known to spend a larger proportion of their time, and to include island-associated habitat that allows for movement between and around each island. This full range of depths - from the 45-m to the 3200-m depth contours - incorporates a majority of the tracking locations of MHI IFKW and includes those island-associated habitats and features essential to the MHI IFKWS DPS. This area under consideration for critical habitat includes 56,821 km² (21,933 mi²) or 30 percent of the MHI IFKW DPS' range.

Need for Special Management Considerations or Protection

Joint NMFS and USFWS regulations at 50 CFR 424.02 define special management considerations or protection to mean methods or procedures useful in protecting physical and biological features essential to the conservation of listed species.

Several activities were identified that may threaten the physical and biological features essential to conservation such that special management considerations or protection may be required, based on information from the MHI IFKW Recovery Outline, Status Review for this DPS, and discussions from the Main Hawaiian Islands Insular False Killer Whale Recovery Planning Workshop (Oleson *et al.*, 2010, NMFS 2016). Major categories of activities include: (1) in-water construction (including dredging); (2) energy development (including renewable energy projects); (3) activities that affect water quality; (4) aquaculture/mariculture; (5) fisheries; (6) environmental restoration and response activities (including responses to oil spills and vessel groundings, and marine debris clean-up activities); and (7) some military activities. All of these activities may have an effect on one or more of the essential features by altering the quantity, quality or availability of the features that support MHI IFKW critical habitat. This is not an exhaustive or complete list of potential effects; rather it is a description of the primary concerns and potential effects that we are aware of at this time and that should be considered in accordance with section 7 of the ESA when Federal agencies authorize, fund, or carry out these activities. The draft Biological Report (NMFS 2017a) and draft Economic Analysis Report (Cardno 2017) provide a more detailed description of the potential effects of each category of activities and threats on the essential features. For example, activities such as in-water construction, energy projects, aquaculture

projects, and some military activities may have impacts on one or more of the essential features.

Unoccupied Critical Habitat Areas

Section 3(5)(A)(ii) of the ESA authorizes the designation of “specific areas outside the geographical area occupied” at the time the species is listed, if the Secretary determines “that such areas are essential for the conservation of the species.” There is insufficient evidence at this time to indicate that areas outside the present range are essential for the conservation of this DPS; therefore, no unoccupied areas were identified for designation.

Application of ESA Section 4(a)(3)(B)(i) (Military Lands)

Section 4(a)(3)(B) of the ESA prohibits designating as critical habitat any lands or other geographical areas owned or controlled by DOD, or designated for its use, that are subject to an INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such a plan provides a benefit to the species for which critical habitat is proposed for designation.

Regulations at 50 CFR 424.12(h) provide that in determining whether an applicable benefit is provided by a “compliant or operational” plan, we will consider:

- (1) The extent of the area and features present;
- (2) The type and frequency of use of the area by the species;
- (3) The relevant elements of the INRMP in terms of management objectives, activities covered, and best management practices, and the certainty that the relevant elements will be implemented; and

(4) The degree to which the relevant elements of the INRMP will protect the habitat from the types of effects that would be addressed through a destruction-or-adverse-modification analysis.

In May 2017, we requested information from the DOD to assist in our analysis. Specifically, we asked for a list of facilities that occur within the potential critical habitat areas and available INRMPs for those facilities. The U.S. Navy stated that areas subject to the Joint Base Pearl Harbor Hickam (JBPHH) INRMP overlap with the areas under consideration for MHI IFKW critical habitat; no other INRMPs were identified as overlapping with the potential designation. The JBPHH INRMP provided by the Navy was signed in 2012. The Naval Defensive Sea Area (NDSA) and the Ewa Training Minefield are subject to the JBPHH INRMP and overlap approximately 23 km² (~9 mi²) and 4 km² (~1.5 mi²), respectively, with the areas under consideration for MHI IFKW critical habitat. Satellite-tracking information indicates that these areas are low-use or (low-density) areas for MHI IFKWs (Baird *et al.*, 2012). This INRMP was drafted prior to the ESA listing of the MHI IFKW and it currently does not incorporate conservation measures that are specific to MHI IFKWs. This plan is compliant through the end of 2017 and the Navy will review and update the JBPHH INRMP starting in 2018, which will include additional information about how on-going conservation measures at JBPHH support MHI IFKWs and their habitat.

In the response to NMFS' request for information about this INRMP, the Navy outlined several elements of the 2012 INRMP and ongoing conservation measures that may benefit the MHI IFKW and their habitat, including: fishing restrictions adjacent to and within areas that overlap the potential designation; creel surveys that provide

information about fisheries in unrestricted areas of Pearl Harbor; restrictions on free roaming cats and dogs in residential areas; feral animal removal; participation in the Toxoplasmosis and At-large Cat Technical working group (which focuses on providing technical information to support policy decisions to address the effects of toxoplasmosis on protected wildlife and provides education and outreach materials on the impacts that free-roaming cats have on Hawaii's environment); efforts taken to prevent and reduce the spread of biotoxins and contaminants from Navy lands (including best management practices, monitoring for contamination, restoration of sediments, and spill prevention); a Stormwater Management Plan and a Stormwater Pollution Control Plan associated with their National Pollutant Discharge Elimination System (NPDES); and coastal wetland habitat restoration projects.

Although the JBPHH INRMP does not specifically address the MHI IFKW, we agree that several of the above measures support the protection of the IFKW and the physical and biological features identified for this designation. Specifically, the Navy's efforts focused on preventing the spread of toxoplasmosis, biotoxins, and other contaminants to the marine environment provide protections for MHI IFKW water quality and address threats to this feature; these threats are identified in our draft Biological Report (NMFS 2017a). Further, efforts to support coastal wetland habitat restoration provide protections for MHI IFKW water quality and provide ancillary benefits to MHI IFKW prey, which also rely on these marine ecosystems. Additionally, fishery restrictions in the NDSA and Ewa Training Minefield provide protections to MHI IFKW prey within the limited overlap areas. Some of the protections associated with the management of stormwater and pollution address effects that would otherwise be

addressed through an adverse modification analysis. Other protections, associated with the spread of toxoplasmosis to the marine environment or that enhance prey, address effects to MHI IFKW habitat that otherwise may not be subject to a section 7 consultation or an adverse modification analysis because the activities that create these stressors are not funded, carried out, or authorized by a Federal agency. In these instances, the Navy's INRMP provides protections aligned with 7(a)(1) of the ESA, which instructs Federal agencies to aid in the conservation of listed species.

After consideration of the above factors, we have determined that the Navy's JBPHH INRMP provides a benefit to the MHI IFKW and its habitat. In accordance with 4(a)(3)(B)(i) of the ESA, the Ewa Training Minefield, and the Naval Defense Sea Area, both found south of Oahu, are not eligible for designation of MHI IFKW critical habitat.

Application of ESA Section 4(b)(2)

Section 4(b)(2) of the ESA requires the Secretary to consider the economic, national security, and any other relevant impacts of designating any particular area as critical habitat. Any particular area may be excluded from critical habitat if the Secretary determines that the benefits of excluding the area outweigh the benefits of designating the area. The Secretary may not exclude a particular area from designation if exclusion will result in the extinction of the species. Because the authority to exclude is discretionary, exclusion is not required for any areas. In this proposed designation, the Secretary has applied statutory discretion to exclude 10 occupied areas from critical habitat where the benefits of exclusion outweigh the benefits of designation for the reasons set forth below.

In preparation for the ESA section 4(b)(2) analysis we identified the “particular areas” to be analyzed. The “particular areas” considered for exclusion are defined based on the impacts that were identified. We considered economic impacts and weighed the economic benefits of exclusion against the conservation benefits of designation for two particular areas where economic impacts were identified as being potentially much higher than the costs of administrative efforts and where impacts were geographically concentrated. We also considered exclusions based on impacts on national security. Delineating particular areas based on impacts on national security was based on land ownership or control (*e.g.*, land controlled by the DOD within which national security impacts may exist) or on areas identified by DOD as supporting particular military activities. We request information on other relevant impacts that should be considered (see “Public Comments Solicited”). For each particular area we identified the impacts of designation (*i.e.*, the costs of designation). These impacts of designation are equivalent to the benefits of exclusion. We also consider the benefits achieved from designation or the conservation benefits that may result from a critical habitat designation in that area. We then weigh the benefits of designation against the benefits of exclusion to identify areas where the benefits of exclusion outweigh the benefits of designation. These steps and the resulting list of areas proposed for exclusion from designation are described in detail in the sections below.

Impacts of Designation

The primary impact of a critical habitat designation stems from the requirement under section 7(a)(2) of the ESA that Federal agencies ensure that their actions are not likely to result in the destruction or adverse modification of critical habitat. Determining

this impact is complicated by the fact that section 7(a)(2) contains the overlapping requirement that Federal agencies must also ensure their actions are not likely to jeopardize the species' continued existence. One incremental impact of the designation is the extent to which Federal agencies modify their actions to ensure their actions are not likely to destroy or adversely modify the critical habitat of the species, beyond any modifications they would make because of the listing and the jeopardy requirement. When the same modification would be required due to impacts to both the species and critical habitat, the impact of the designation is considered co-extensive with the ESA listing of the species (*i.e.*, attributable to both the listing of the species and the designation of critical habitat). Additional impacts of designation include State and local protections that may be triggered as a result of the designation, and the benefits from educating the public about the importance of each area for species conservation. Thus, the impacts of the designation include conservation impacts for MHI IFKW and its habitat, economic impacts, impacts on national security and other relevant impacts that may result from the designation and the application of ESA section 7(a)(2).

In determining the impacts of designation, we focused on the incremental change in Federal agency actions as a result of critical habitat designation and the adverse modification provision, beyond the changes predicted to occur as a result of listing and the jeopardy provision. Following a line of recent court decisions (including Arizona Cattle Growers Association v. Salazar, 606 F. 3d 1160 (9th Cir. 2010) , *cert. denied*, 562 U.S. 1216 (2011) (Arizona Cattle Growers); and Home Builders Association of Northern California et al., v. U.S. Fish and Wildlife Service, 616 F.3d 983 (9th Cir. 2010), *cert. denied*, 562 U.S. 1217 (2011) (Home Builders)), economic impacts that occur regardless

of the critical habitat designation are treated as part of the regulatory baseline and are not factored into the analysis of the effects of the critical habitat designation. In other words, we focus on the potential incremental impacts beyond the impacts that would result from the listing and jeopardy provision. In some instances, potential impacts from the critical habitat designation could not be distinguished from protections that may already occur under the baseline (*i.e.*, protections already afforded MHI IFKW^s under its listing or under other Federal, state, and local regulations). For example, the project modifications needed to prevent destruction or adverse modification of critical habitat may be similar to the project modifications necessary to prevent jeopardy to the species in an area. The extent to which these modifications differ may be project specific, and the incremental changes or impacts to the project may be difficult to tease apart without further project specificity.

Once we determined the impacts of the designation, we then determined the benefits of designation and the benefits of exclusion based on the impacts of the designation. The benefits of designation include the conservation impacts for MHI IFKW^s and their habitat that result from the critical habitat designation and the application of ESA section 7(a)(2). The benefits of exclusion include avoidance of the economic, national security, and other relevant impacts (*e.g.*, impacts on conservation plans) of the designation if a particular area were to be excluded from the critical habitat designation. The following sections describe how we determined the benefits of designation and the benefits of exclusion, and how those benefits were considered, as required under section 4(b)(2) of the ESA, to identify particular areas that may be eligible for exclusion from the designation. We also summarize the results of our weighing

process and determinations of the areas that may be eligible for exclusion (for additional information see the Draft ESA Section 4(b)(2) Report (NMFS 2017b)).

Benefits of Designation

The primary benefit of designation is the protection afforded under section 7(a)(2) of the ESA, requiring all Federal agencies to ensure their actions are not likely to destroy or adversely modify designated critical habitat. This is in addition to the requirement that all Federal agencies ensure their actions are not likely to jeopardize the continued existence of the species. Section 7(a)(1) of the ESA also requires all Federal agencies to use their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of endangered and threatened species. Another benefit of critical habitat designation is that it provides specific notice of the features essential to the conservation of the MHI IFKW DPS and where those features occur. This information will focus future consultations and other conservation efforts on the key habitat attributes that support conservation of this DPS. There may also be enhanced awareness by Federal agencies and the general public of activities that might affect those essential features. Accordingly, identification of these features may improve discussions with action agencies regarding relevant habitat considerations of proposed projects.

In addition to the protections described above, Chapter 12 of the draft Economic Report (Cardno 2017) discusses other forms of indirect benefits that may be attributed to the designation, including but not limited to, use benefits, and non-use or passive use benefits (Cardno 2017). Use benefits include positive changes that protections associated with the designation may provide for resource users, such as increased fishery resources, sustained or enhanced aesthetic appeal in ocean areas, or sustained wildlife-viewing

opportunities. Non-use or passive benefits include those independent of resource use, where conservation of MHI IFKW habitat aligns with beliefs or values held by particular entities (*e.g.*, existence, bequest, and cultural values) (Cardno 2017). More information about these types of values may be found in Chapter 12 of the draft Economic Report (Cardno 2017).

Most of these benefits are not directly comparable to the costs of designation for purposes of conducting the section 4(b)(2) analysis described below. Ideally, benefits and costs should be compared on equal terms (*e.g.*, apples to apples); however, there is insufficient information regarding the extent of the benefits and the associated values to monetize all of these benefits. We have not identified any available data to monetize the benefits of designation (*e.g.*, estimates of the monetary value of the essential features within areas designated as critical habitat, or of the monetary value of education and outreach benefits). Further, section 4(b)(2) also requires that we consider and weigh impacts other than economic impacts that may be intangible and do not lend themselves to quantification in monetary terms, such as the benefits to national security of excluding areas from critical habitat. Given the lack of information that would allow us either to quantify or monetize the benefits of the designation for MHI IFKWs discussed above, we determined that conservation benefits should be considered from a qualitative standpoint. In determining the benefits of designation, we considered a number of factors. We took into account MHI IFKW use of the habitat, the existing baseline protections that may protect that habitat regardless of designation, and how essential features may be affected by activities that occur in these areas if critical habitat were not designated. These factors

combined provided an understanding of the importance of protecting the habitat for the overall conservation of the DPS.

Generally, we relied on density analysis of satellite-tracking data to provide information about MHI IFKW habitat use. Cascadia Research Collective supplied these data (using the methods previously outlined in Baird *et al.*, 2012) to support NMFS' critical habitat designation. The data included information from 27 tagged individuals (18 from Cluster 1, 1 from Cluster 2, 7 from Cluster 3, and 1 from Cluster 4) (Baird pers. communication June 2017). For maps of these areas see the Draft ESA Section 4(b)(2) Report (NMFS 2017b). High-use areas denote areas where satellite-tracking information indicates MHI IFKWs spend more time. Due to the increased time spent in these areas, we inferred that these high-use areas have a higher conservation value than low-use areas of the range. As noted in the draft Biological Report (NMFS 2017a), there is limited representation among social clusters in the tracking data, and information received does not span the full calendar year. Therefore, this data set may not be fully representative of MHI IFKWs' habitat use. Where available, we included additional information that may supplement our understanding of MHI IFKW habitat use patterns (*e.g.*, patterns of MHI IFKW habitat use from observational studies). Generally, we describe high-use areas as indicating areas of higher conservation value where greater foraging and/or reproductive opportunities are believed to exist. However, all areas support the essential features and meet the definition of critical habitat for this DPS. Within a restricted range, low-use areas continue to offer essential features and may provide unique opportunities for foraging as oceanic conditions vary seasonally or temporally.

Economic Impacts of Designation

Economic costs of the designation accrue primarily through implementation of section 7 of the ESA in consultations with Federal agencies to ensure their proposed actions are not likely to destroy or adversely modify critical habitat. The draft Economic Report (Cardno 2017) considered the Federal activities that may be subject to a section 7 consultation and the range of potential changes that may be required for each of these activities under the adverse modification provision. Where possible, the analysis focused on changes beyond those impacts that may result from the listing of the species or that are established within the environmental baseline. However, the report acknowledges that some existing protections to prevent jeopardy to MHI IFKW are likely to overlap with those protections that may be put in place to prevent adverse modification (Cardno 2017). The project modification impacts represent the benefits of excluding each particular area (that is, the impacts that would be avoided if an area were excluded from the designation).

The draft Economic Report (Cardno 2017) estimates the impacts based on activities that are considered reasonably foreseeable, which include activities that are currently authorized, permitted, or funded by a Federal agency, or for which proposed plans are currently available to the public. These activities align with those identified under the *Need for Special Management Considerations and Protection* section (above). Projections were evaluated for the next 10-year period. The analysis relied upon NMFS' records of section 7 consultations to estimate the average number of projects that were likely to occur within the specific area (*i.e.*, projections were also based on past numbers of consultations) and to determine the level of consultation (formal, informal) that would be necessary based on the described activity.

The draft Economic Report (Cardno 2017) identifies the total estimated present value of the quantified incremental impacts of this designation to be between approximately 196,000 to 213,000 dollars over the next 10 years; on an annualized undiscounted basis, the impacts are equivalent to 19,600 to 21,300 dollars per year. These impacts include only additional administrative efforts to consider critical habitat in section 7 consultations for the section 7 activities identified under the *Need for Special Management Considerations or Protection* section of this rule. However, private energy developers may also bear some of the administrative costs of consultation for large energy projects; annually these costs are estimated between 0 and 300 dollars undiscounted and are expected to involve three consultation projects over the next 10 years. Across the MHI, economic impacts are expected to be small and largely associated with the administrative costs borne by Federal agencies, but may include low administrative costs to non-federal entities as well.

Both the draft Biological Report and the draft Economic Report recognize that some of the future impacts of the designation are difficult to predict (NMFS 2017a, Cardno 2017). Although considered unlikely, NMFS cannot rule out future modifications for federally managed fisheries and activities that contribute to water quality (NMFS 2017a). For federally managed fisheries, modifications were not predicted based on current management of the fisheries. However, we noted that future revised management measures could result as more information is gained about MHI IFKW foraging ecology, or as we gain a better understanding of the relative importance of certain prey species to the health and recovery of a larger MHI IFKW population. Similarly, modifications to water quality standards were not predicted as a result of this designation; however, future

modifications were not ruled out because future management measures may be necessary as more information is gained about how pollutants affect MHI IFKW critical habitat. The draft Economic Report discusses this qualitatively, but does not provide quantified costs associated with any uncertain future modifications (Cardno 2017).

In summary, economic impacts from the designation are largely attributed to the administrative costs of consultations. Generally, the quantified economic impacts for this designation are relatively low because in Hawaii most projects that would require section 7 consultation occur onshore or nearshore and would not overlap with the designation. Projects with a Federal nexus (*i.e.*, funded, authorized, or carried out by a Federal agency) that occur in deeper waters are already subject to consultation under section 7 to ensure that activities are not likely to jeopardize MHI IFKWs, and throughout the specific area, activities of concern are already subject to multiple environmental laws, regulations, and permits that afford the essential features a high level of baseline protection. Despite these protections, significant uncertainty remains regarding the true extent of the impacts that some activities like fishing and activities affecting water quality may have on the essential features, and economic impacts of the designation may not be fully realized. Because the economic impacts of these activities are largely speculative, we lack sufficient information with which to balance them against the benefits of designation.

The draft Economic Report (Cardno 2017) found that costs attributed with this designation are largely administrative in nature and that a majority of those costs are borne by Federal agencies, with only a small cost of consultation (approximately 0 to 3,000 dollars over the next 10 years) borne by non-Federal entities. These impacts are expected to occur as a result of three potential offshore wind-energy projects in the

Bureau of Ocean Energy Management's Call Area offshore the island of Oahu (which includes two sites, one off Kaena point and one off the south shore) (81 FR 41335; June 24, 2016). The area overlaps with approximately 1,961 km² (757 mi²), or approximately 3.5 percent of the areas under consideration for designation. Density analysis of satellite-tracking information indicates that these sites are not high-use areas for MHI IFKWs. As noted above, the baseline protections are strong, and energy projects are likely to undergo formal section 7 consultation to ensure that the activities are not likely to jeopardize MHI IFKWs, along with other protected species (Cardno 2017).

Although economic costs of this designation are considered low, NMFS also considers the potential intangible costs of designation in light of Executive Order 13795, *Implementing an America-First Offshore Energy Strategy*, which sets forth the nation's policy for encouraging environmentally responsible energy exploration and production, including on the Outer Continental Shelf, to maintain the Nation's position as a global energy leader and foster energy security. In particular, both Hawaii's State Energy Office and the Bureau of Ocean Energy Management expressed concerns that the designation may discourage companies from investing in offshore energy projects in areas that are identified as critical habitat and noted that the costs of lost opportunities to meet Hawaii's renewable energy goals could be significant (Cardno 2017). Because Oahu has the greatest energy needs among the Main Hawaiian Islands and has limited areas available for this type of development, and receiving energy via interconnection between islands is technologically difficult, these wind projects off Oahu are considered necessary to meet the State of Hawaii's renewable energy goals of 100 percent renewable energy by 2045 (Cardno 2017).

Although large in-water construction projects are an activity of concern for this DPS, we anticipate that consultations required to ensure that activities are not likely to jeopardize the MHI IFKWs will achieve substantially the same conservation benefits for this DPS. Specifically, we anticipate that conservation measures implemented as a result of consultation to address impacts to the species will also provide incidental protections to habitat features. Additionally, Federal activities that may result in destruction or adverse modification are not expected in these areas if developed for wind energy projects. Given the significance of this offshore area in supporting renewable energy goals for the State of Hawaii and the goals of Executive Order 13795, the low administrative costs of this designation, and the low-use of this area by MHI IFKWs, we find that the benefits of exclusion of this identified area outweigh the benefits of designation. Based on our best scientific judgment, and acknowledging the relatively small size of this area (approximately 3.5 percent of the overall designation), and other safeguards that are in place (e.g., protections already afforded MHI IFKWs under its listing and other regulatory mechanisms), we conclude that exclusion of this area will not result in the extinction of the species.

Our exclusion analysis is based on the current BOEM Call Area as published in 81 FR 41335 (June 24, 2016). However, NMFS is aware that the Navy has conducted an offshore wind energy mission compatibility assessment of the waters surrounding Oahu to support BOEM and the State of Hawaii in identifying areas that will support wind energy development and be compatible with the Navy mission requirements. At this time, NMFS cannot reliably predict what Call Area boundary revisions may be made as a result of this assessment or continuing consultations between the Navy and BOEM.

Accordingly, while our proposed designation is based on the current Call Area, NMFS will reevaluate this 4(b)(2) analysis prior to publishing a final designation, taking into account any planned boundary changes in the Call Area.

National Security Impacts

The national security benefits of exclusion are the national security impacts that would be avoided by excluding particular areas from the designation. We contacted representatives of DOD and the Department of Homeland Security to request information on potential national security impacts that may result from the designation of particular areas as critical habitat for the MHI IFKW DPS. In response to the request, the Navy and U.S. Coast Guard each submitted a request that all areas be excluded from critical habitat out of concerns associated with activities that introduce noise to the marine environment. Although we considered the request for exclusion of all areas proposed for critical habitat (see Table 1), we also separately considered particular areas identified by the Navy because these areas support specific military activities. The Coast Guard did not provide specific explanations with regard to particular areas. The Air Force provided a request for exclusion that included the waters leading to and the offshore ranges of the Pacific Missile Range Facility (PMRF). As the PMRF offshore ranges were also highlighted as important to Navy activities, we included considerations associated with the Air Force's request for exclusion for the PMRF ranges with the Navy's information, due to the similarities between the activities and impacts identified for these areas (*e.g.*, both requests in this area were associated with training and testing activities). We separately considered the waters leading to the range for exclusion because activities differ from those planned for the PMRF ranges and DOD does not exert control over these areas.

Although not specifically requested for exclusion, the Navy highlighted the Puuloa Underwater Detonation Range in the materials they provided; this area was not considered for exclusion because it does not overlap with the areas under consideration for critical habitat. We considered a total of 13 sites for exclusion, and we propose 8 of those sites for exclusion; the results of the impacts vs. benefits for the 13 sites are summarized in Table 1 (below).

As in the analysis of economic impacts, we weighed the benefits of exclusion (*i.e.*, the impacts to national security that would be avoided) against the benefits of designation. The Navy and Air Force provided information regarding the activities that take place in each area, and they assessed the potential for a critical habitat designation to adversely affect their ability to conduct operations, tests, training, and other essential military activities. The possible impacts to national security summarized by both groups included restraints and constraints on military operations, training, research and development, and preparedness vital for combat operations for around the world.

The primary benefit of exclusion is that the DOD would not be required to consult with NMFS under section 7 of the ESA regarding DOD actions that may affect critical habitat, and thus potential delays or costs associated with conservation measures for critical habitat would be avoided. For each particular area, national security impacts were weighed considering the intensity of use of the area by DOD and how activities in that area may affect the features essential to the conservation of MHI IFKWs. Where additional consultation requirements are likely due to critical habitat at a site, we considered how the consultation may change the DOD activities, and how unique the DOD activities are at the site.

Benefits to the conservation of MHI IFKW depend on whether designation of critical habitat at a site leads to additional conservation of the DPS above what is already provided by being listed as endangered under the ESA in the first place. We weighed the potential for additional conservation by considering several factors that provide an understanding of the importance of protecting the habitat for the overall conservation of the DPS including: MHI IFKW use of the habitat, the existing baseline protections that may protect that habitat regardless of designation, and the likelihood of other Federal (non-DOD) actions being proposed within the site that would be subject to section 7 consultation associated with critical habitat. Throughout the weighing process the overall size of the area considered for exclusion was considered, along with our overall understanding of importance of protecting that area for conservation purposes.

As discussed in the *Benefits of Designation* section (above), the benefits of designation may not be directly comparable to the benefits of exclusion for purposes of conducting the section 4(b)(2) analysis, because neither may be fully quantified. The Draft ESA Section 4(b)(2) Report (NMFS 2017b) provides our qualitative comparison of the national security impacts to the conservation benefits in order to determine which is greater. If we found that national security impacts outweigh conservation benefits, the site is excluded from the proposed critical habitat. If conservation benefits outweigh national security impacts, the site is not excluded from the proposed critical habitat. The decision to exclude any sites from a designation of critical habitat is always at the discretion of NMFS. Table 1 (below) outlines the determinations made for each particular area identified and the factors that weighed significantly in that process.

Table 1 – Summary of the Assessment of Particular Areas for Exclusion for the DOD and U.S. Coast Guard based on impacts on national security.

DOD Site; Agency	Size of particular area; approximate percent of the total area under consideration	Exclusion Proposed?	Significant weighing factors
(1) Entire Area Under Consideration for Designation; Navy and Coast Guard	56,821 km ² (21,933 mi ²); 100%	No	This area includes the entire designation and all benefits from MHI IFKW critical habitat would be lost. Impacts from delays and possible major modifications to consultation are outweighed by benefits of protecting the entire area, which includes both high and low-use MHI IFKW habitat, from future DOD and non-DOD Federal actions.
(2) PMRF Offshore Areas; Navy and Air Force	843 km ² (~325 mi ²); 1.5%	Yes	This area overlaps a relatively small area of low-use MHI IFKW habitat. This area is unique for DOD and provides specific opportunities important for DOD training and testing. The impacts from delays and possible major modifications to consultation outweigh benefits of protecting low-use habitat where future non-DOD Federal actions are considered unlikely.
(3) Waters on-route to PMRF from the Port Allen Harbor; Air Force	1,077 km ² (~416 mi ²); 2%	No	This area overlaps a relatively small area of low-use MHI IFKW habitat that is not owned or controlled by DOD. It is possible that non-DOD Federal actions could be proposed within the site that may affect the essential features. Impacts from DOD section 7 consultations are expected to be minor. Thus, short delays for minor modifications to consultation are outweighed by benefits of protecting this habitat from future DOD and non-DOD Federal actions.
(4) Kingfisher Range; Navy	14 km ² (~6 mi ²); 0.03%	Yes	This area overlaps a small area of low-use MHI IFKW habitat. This area is unique for DOD and provides specific opportunities for DOD training. Impacts from short delays from minor modifications to consultation outweigh benefits of protecting low-use habitat where future non-DoD Federal actions are considered unlikely.

(5) Warning Area 188; Navy	2,674 km ² (~1,032 mi ²); 5%	Yes	This area overlaps a medium area of low-use MHI IFKW habitat. DOD maintains control over portions of the nearshore area, and uses deeper waters for important training activities. Impacts from delays and possible major modifications to consultation outweigh benefits of protecting low-use habitat where future non-DoD Federal actions are considered unlikely.
(6) Kaula and Warning Area W-187; Navy	266 km ² (~103 mi ²); 0.5%	Yes	This area overlaps a small area of low-use MHI IFKW habitat. This area is unique for DOD and provides specific opportunities for DOD training. Impacts from short delays from expected informal consultation outweigh benefits of protecting low-use habitat where future non-DoD Federal actions are considered unlikely.
(7) Warning Area 189, HELO Quickdraw Box and Oahu Danger Zone; Navy	2,886 km ² (~1,114 mi ²); 5%	No	This area overlaps a medium area of low-use MHI IFKW habitat and a small high-use area for MHI IFKWs. The DOD does not maintain full control over these waters. Impacts from delays and possible modifications to consultation are outweighed by benefits of protecting both high and low-use MHI IFKW habitat, from future DOD and non-DOD Federal actions.
(8) Fleet Operational Readiness Accuracy Check Site Range (FORACS); Navy	74 km ² (~29 mi ²); 0.1%	Yes	This area overlaps a small area of low-use MHI IFKW habitat. This area is unique for DOD and provides specific opportunities for DOD testing to maintain equipment accuracy. Impacts from delays and possible modifications to consultation outweigh benefits of protecting low-use habitat where future non-DoD Federal actions are considered unlikely.
(9) Shipboard Electronic Systems Evaluation Facility Range (SESEF); Navy	74 km ² (~29 mi ²); 0.1%	Yes	This area overlaps a small area of low-use MHI IFKW habitat. This area is unique for DOD and provides specific opportunities for DOD testing to maintain equipment accuracy. Impacts from delays and possible modifications to consultation outweigh benefits of protecting low-use habitat where future non-DoD Federal actions are considered unlikely.

(10) Warning Areas 196 and 191; Navy	728 km2 (~281 mi2); 1%	Yes	This area overlaps a relatively small area of low-use MHI IFKW habitat that is used by DOD. Impacts from short delays and possible modifications to consultation outweigh benefits of protecting low-use habitat where future non-DoD Federal actions are considered unlikely.
(11) Warning Areas 193 and 194; Navy	458 km2 (~177 mi2); 1%	Yes	This area overlaps a relatively small area of low-use MHI IFKW habitat that is used by DOD. Impacts from short delays and possible modifications to consultation outweigh benefits of protecting low-use habitat where future non-DoD Federal actions are considered unlikely.
(12) Four Islands Region (Maui, Lanai, Molokai Kahoolawe); Navy	15,389 km2 (~5,940 mi2); 27%	No	This area includes a relatively large area of both high and low-use MHI IFKW habitat that is not owned or controlled by DOD. Impacts from delays and possible major modifications to consultation are outweighed by benefits of protecting the entire area, which includes both high and low-use MHI IFKW habitat, from future DOD and non-DOD Federal actions.
(13) Hawaii Island; Navy	16,931 km2 (~6,535 mi2); 30%	No	This area includes a relatively large area of both high and low-use MHI IFKW habitat that is not owned or fully controlled by DOD. Impacts from delays and possible major modifications to consultation are outweighed by benefits of protecting the entire area, which includes both high and low-use MHI IFKW habitat, from future DOD and non-DOD Federal actions.

In coordination with DOD, the Navy requested review of six additional areas for exclusion due to national security impacts (see Figure 2). These additional areas are subsets of a larger area that the Navy initially requested for exclusion (see Table I, Site 1), but which NMFS determined should not be excluded under 4(b)(2). These areas include 1) the Kaulakahi Channel portion of Warning area 186, as it abuts PMRF offshore areas; 2) the area to the north and east of Oahu including a small portion of Warning Area 189 and the Helo Quickdraw Box; 3) the area to the south of Oahu; 4) the Kaiwi Channel; 5) the area north and offshore of the Molokai-associated MHI IFKW high use area; and 6) the Alenuihaha Channel. In order to meet our publishing deadline for the proposed designation, NMFS will reconsider its decision as it pertains to these individual areas consistent with the weighing factors used in the draft 4(b)(2) Report (NMFS 2017b), and provide exclusion determinations for these requests in the final rule.

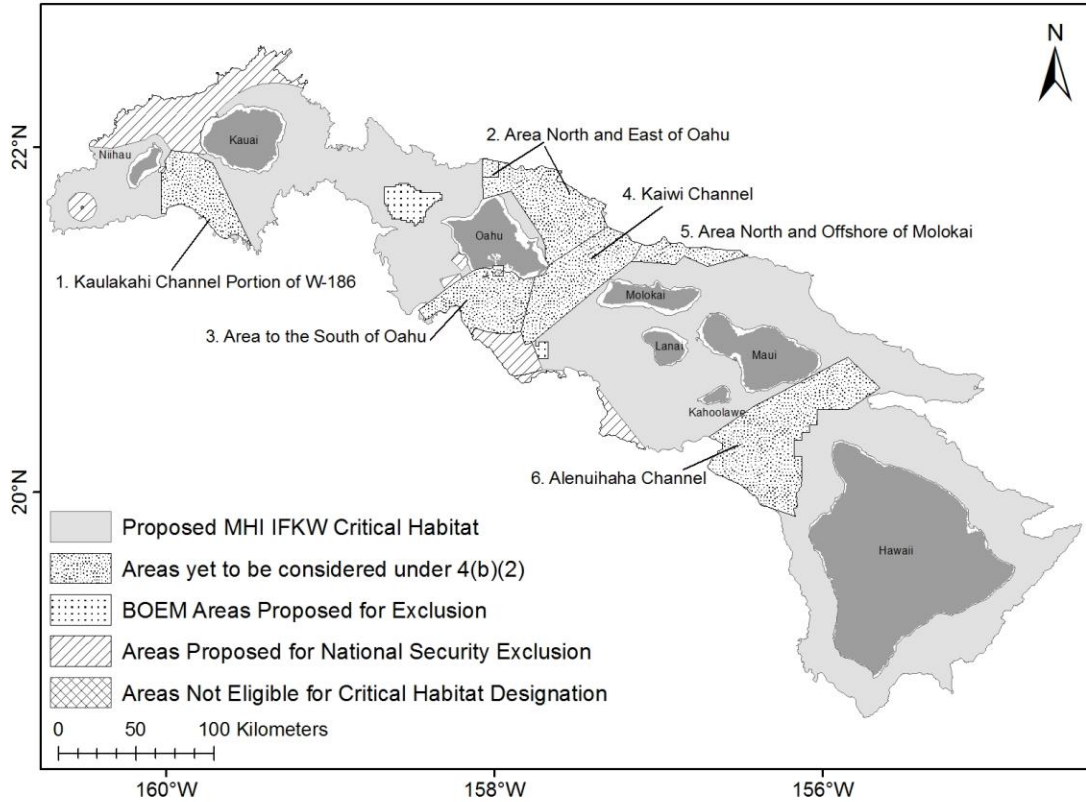


FIGURE 2. MHI IFKW CH Areas Under Consideration for National Security Exclusions

Other Relevant Impacts of the Designation

Finally, under ESA section 4(b)(2) we consider any other relevant impacts of critical habitat designation to inform our decision as to whether to exclude any areas. For example, we may consider potential adverse effects on existing management plans or conservation plans that benefit listed species, and we may consider potential adverse effects on tribal lands or trust resources. In preparing this proposed designation, we have not identified any such management or conservation plans, tribal lands or resources, or anything else that would be adversely affected by the proposed critical habitat designation. Accordingly, subject to further consideration based on public comment, we do not exercise our discretionary authority to exclude any areas based on other relevant impacts.

Proposed Critical Habitat Designation

This rule proposes to designate approximately 49,701 km² (19,184 mi²) of marine habitat surrounding the main Hawaiian Islands within the geographical area presently occupied by the MHI IFKW. This critical habitat area contains physical or biological features essential to the conservation of the DPS that may require special management considerations or protection. We have not identified any unoccupied areas that are essential to conservation of the MHI IFKW DPS and are not proposing any such areas for designation as critical habitat. This rule proposes to exclude from the designation the following areas: (1) the Bureau of Ocean Energy Management's Call Area offshore of the Island of Oahu (which includes two sites, one off Kaena point and one off the south shore), (2) the Pacific Missile Range Facilities Offshore ranges (including the Shallow

Water Training Range (SWTR), the Barking Sands Tactical Underwater Range (BARSTUR), and the Barking Sands Underwater Range Extension (BSURE), (3) the Kingfisher Range, (4) Warning Area 188, (5) Kaula and Warning Area 187, (6) the Fleet Operational Readiness Accuracy Check Site (FORACS) Range, (7) the Shipboard Electronic Systems Evaluation Facility (SESEF), (8) Warning Areas 196 and 191, and (9) Warning Areas 193 and 194. Based on our best scientific knowledge and expertise, we conclude that the exclusion of these areas will not result in the extinction of the DPS, and will not impede the conservation of the DPS. In addition, the Ewa Training Minefield and the Naval Defensive Sea Area are precluded from designation under section 4(a)(3) of the ESA because they are managed under the Joint Base Pearl Harbor-Hickam Integrated Natural Resource Management Plan that we find provides a benefit to the Main Hawaiian Islands insular false killer whale.

Effects of Critical Habitat Designations

Section 7(a)(2) of the ESA requires Federal agencies, including NMFS, to ensure that any action authorized, funded or carried out by the agency (agency action) is not likely to jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify designated critical habitat. When a species is listed or critical habitat is designated, Federal agencies must consult with NMFS on any agency action to be conducted in an area where the species is present and that may affect the species or its critical habitat. During the consultation, NMFS evaluates the agency action to determine whether the action may adversely affect listed species or critical habitat and issues its finding in a biological opinion. If NMFS concludes in the biological opinion that the agency action would likely result in the destruction or adverse modification of critical

habitat, NMFS would also recommend any reasonable and prudent alternatives to the action. Reasonable and prudent alternatives are defined in 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid the destruction or adverse modification of critical habitat.

Regulations at 50 CFR 402.16 require Federal agencies that have retained discretionary involvement or control over an action, or where such discretionary involvement or control is authorized by law, to reinitiate consultation on previously reviewed actions in instances where: (1) Critical habitat is subsequently designated; or (2) new information or changes to the action may result in effects to critical habitat not previously considered in the biological opinion. Consequently, some Federal agencies may request re-initiation of consultation or conference with NMFS on actions for which formal consultation has been completed, if those actions may affect designated critical habitat. Activities subject to the ESA section 7 consultation process include activities on Federal lands, as well as activities requiring a permit or other authorization from a Federal agency (*e.g.*, a section 10(a)(1)(B) permit from NMFS), or some other Federal action, including funding (*e.g.*, Federal Highway Administration (FHA) or Federal Emergency Management Agency (FEMA) funding). ESA section 7 consultation would not be required for Federal actions that do not affect listed species or critical habitat, and would not be required for actions on non-Federal and private lands that are not carried out, funded, or authorized by a Federal agency.

Activities That May be Affected

ESA section 4(b)(8) requires, to the maximum extent practicable, in any proposed regulation to designate critical habitat, an evaluation and brief description of those activities (whether public or private) that may adversely modify such habitat or that may be affected by such designation. A wide variety of activities may affect MHI IFKW critical habitat and may be subject to the ESA section 7 consultation processes when carried out, funded, or authorized by a Federal agency. The activities most likely to be affected by this critical habitat designation once finalized are: (1) in-water construction (including dredging); (2) energy development (including renewable energy projects); (3) activities that affect water quality; (4) aquaculture/mariculture; (5) fisheries; (6) environmental restoration and response activities (including responses to oil spills and vessel groundings, and marine debris clean-up activities); and (7) some military activities. Private entities may also be affected by this critical habitat designation if a Federal permit is required, Federal funding is received, or the entity is involved in or receives benefits from a Federal project. These activities would need to be evaluated with respect to their potential to destroy or adversely modify critical habitat. Changes to the actions to minimize or avoid destruction or adverse modification of designated critical habitat may result in changes to some activities. Please see the draft Economic Analysis Report (Cardno 2017) for more details and examples of changes that may need to occur in order for activities to minimize or avoid destruction or adverse modification of designated critical habitat. Questions regarding whether specific activities would constitute destruction or adverse modification of critical habitat should be directed to NMFS (see ADDRESSES and FOR FURTHER INFORMATION CONTACT).

Public Comments Solicited

We request that interested persons submit comments, information, and suggestions concerning this proposed rule during the comment period (see DATES). To ensure the final action resulting from this proposal will be as accurate and effective as possible, we solicit comments and suggestions from the public, other concerned governments and agencies, the scientific community, industry or any other interested party concerning this proposed rule. Specifically, public comments are sought concerning: (1) whether it is appropriate to include "habitat free of anthropogenic noise that would significantly impair the value of the habitat for false killer whales' use or occupancy" as a feature essential to the conservation of MHI IFKW in the final rule and, if so, what scientific data are available that would assist us in determining noise levels that result in adverse modification or destruction, such as by inhibiting communication or foraging activities, or causing the abandonment of critical habitat; (2) information regarding potential impacts of designating any particular area, including the types of Federal activities that may trigger an ESA section 7 consultation and the possible modifications that may be required of those activities as a result of section 7 consultation; (3) information regarding the benefits of excluding particular areas from the critical habitat designation; (4) current or planned activities in the areas proposed for designation and their possible impacts on proposed critical habitat; (5) additional information regarding the threats associated with global climate change and known impacts to MHI IFKW critical habitat and/or MHI IFKW essential features; and (6) any foreseeable economic, national security, tribal, or other relevant impacts resulting from the proposed designations. With regard to these described impacts, we request that the following

information be provided to inform our ESA section 4(b)(2) analysis: (1) a map and description of the affected area (*e.g.*, location, latitude and longitude coordinates to define the boundaries, and the extent into waterways); (2) a description of activities that may be affected within the area; (3) a description of past, ongoing, or future conservation measures conducted within the area that may protect MHI IFKW habitat; and (4) a point of contact.

We encourage comments on this proposal. You may submit your comments and materials by any one of several methods (see ADDRESSES). The proposed rule, maps, references and other materials relating to this proposal can be found on our Web site at http://www.fpir.noaa.gov/PRD/prd_mhi_false_killer_whale.html#fwk_esa_listing and on the Federal eRulemaking Portal at <http://www.regulations.gov>, or can be made available upon request. We will consider all comments and information received during the comment period for this proposed rule in preparing the final rule.

Please be aware that all comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (*e.g.*, name, address, etc.) submitted voluntarily by the sender will be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

References Cited

A complete list of all references cited in this proposed rule can be found on our website at:

http://www.fpir.noaa.gov/PRD/prd_mhi_false_killer_whale.html#fwk_esa_listing or at

www.regulations.gov, and is available upon request from the NMFS office in Honolulu, Hawaii (see **ADDRESSES**).

Classification

Takings

Under E.O. 12630, Federal agencies must consider the effects of their actions on constitutionally protected private property rights and avoid unnecessary takings of property. A taking of property includes actions that result in physical invasion or occupancy of private property that substantially affect its value or use. In accordance with E.O. 12630, this proposed rule does not have significant takings implications. The designation of critical habitat for the MHI IFKW DPS is fully described within the offshore marine environment and is not expected to affect the use or value of private property interests. Therefore, a takings implication assessment is not required.

Executive Orders 12866 and 13771

OMB has determined that this proposed rule is significant for purposes of Executive Order 12866 review. Economic and Regulatory Impact Review Analyses and 4(b)(2) analyses as set forth and referenced herein have been prepared to support the exclusion process under section 4(b)(2) of the ESA. To review these documents see **ADDRESSES** section above.

We have estimated the costs for this proposed rule. Economic impacts associated with this rule stem from the ESA's requirement that Federal agencies ensure any action authorized, funded, or carried out will not likely jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. In practice, this requires Federal agencies to consult with NMFS

whenever they propose an action that may affect a listed species or its designated critical habitat, and then to modify any action that could jeopardize the species or adversely affect critical habitat. Thus, there are two main categories of costs: administrative costs associated with completing consultations, and project modification costs. Costs associated with the ESA's requirement to avoid jeopardizing the continued existence of a listed species are not attributable to this rule, as that requirement exists in the absence of the critical habitat designation.

The draft Economic Report (Cardno 2017) identifies the total estimated present value of the quantified impacts above current consultation effort to be between approximately 192,000 to 208,000 dollars over the next 10 years; on an annualized undiscounted basis, the impacts are equivalent to 19,200 to 20,800 dollars per year. These total impacts include the additional administrative efforts necessary to consider critical habitat in section 7 consultations. Across the MHI, economic impacts are expected to be small and largely associated with the administrative costs borne by Federal agencies. However, private energy developers may also bear the administrative costs of consultation for large energy projects. These costs are estimated between 0 and 3,000 dollars over the next 10 years. While there are expected beneficial economic impacts of designating critical habitat, there are insufficient data available to monetize those impacts (see *Benefits of Designation* section).

This proposed rule is not expected to be subject to the requirements of E.O. 13771 because this proposed rule is expected to result in no more than *de minimis* costs.

Executive Order 13132, Federalism

The Executive Order on Federalism, Executive Order 13132, requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations in which a regulation may preempt state law or impose substantial direct compliance costs on state and local governments (unless required by statute). Pursuant to E.O. 13132, we determined that this proposed rule does not have significant federalism effects and that a federalism assessment is not required. However, in keeping with Department of Commerce policies and consistent with ESA regulations at 50 CFR 242.16(c)(1)(ii), we will request information for this proposed rule from the state of Hawaii's Department of Land and Natural Resources. The proposed designation may have some benefit to state and local resource agencies in that the proposed rule more clearly defines the physical and biological features essential to the conservation of the species and the areas on which those features are found.

Energy Supply, Distribution, and Use (Executive Order 13211)

Executive Order 13211 requires agencies to prepare a Statement of Energy Effects when undertaking a "significant energy action." According to Executive Order 13211, "significant energy action" means any action by an agency that is expected to lead to the promulgation of a final rule or regulation that is a significant regulatory action under Executive Order 12866 and is likely to have a significant adverse effect on the supply, distribution, or use of energy. We have considered the potential impacts of this action on the supply, distribution, or use of energy (see section 13.2 of the draft Economic Report; Cardno 2017). In summary, it is unlikely for the oil and gas industry to experience a "significant adverse effect" due to this designation, as Hawaii does not produce petroleum or natural gas, and refineries are not expected to be impacted by this

designation. Offshore energy projects may affect the essential features of critical habitat for the MHI IFKW DPS. However, foreseeable impacts are limited to two areas off Oahu where prospective wind energy projects are under consideration (see *Economic Impacts of Designation* section). Impacts to the electricity industry would likely be limited to potential delays in project development, costs to monitor noise, and possibly additional administrative costs of consultation. The potential critical habitat area is not expected to impact the current electricity production levels in Hawaii. Further, it appears that the designation will have little or no effect on electrical energy production decisions (other than the location of the future project), subsequent electricity supply, or the cost of future energy production. The designation is unlikely to impact the industry by greater than the 1 billion kWh per year or 500 MW of capacity provided as guidance in the executive order. It is therefore unlikely for the electricity production industry to experience a significant adverse effect due to the MHI IFKW critical habitat designation.

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, whenever an agency publishes a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a Regulatory Flexibility Analysis describing the effects of the rule on small entities, *i.e.*, small businesses, small organizations, and small government jurisdictions. An initial regulatory flexibility analysis (IRFA) has been prepared, which is included as Chapter 13 to the draft Economic Report (Cardno 2017). This document is available upon request (see ADDRESSES), via our Web site at

http://www.fpir.noaa.gov/PRD/prd_mhi_false_killer_whale.html#fwk_esa_listing or via the Federal eRulemaking Web site at www.regulations.gov.

A statement of need for and objectives of this proposed rule is provided earlier in the preamble and is not repeated here. This proposed rule will not impose any recordkeeping or reporting requirements.

We identified the impacts to small businesses by considering the seven activities most likely impacted by the designation: (1) in-water construction (including dredging); (2) energy development (including renewable energy projects); (3) activities that affect water quality; (4) aquaculture/mariculture; (5) fisheries; (6) environmental restoration and response activities (including responses to oil spills and vessel groundings, and marine debris clean-up activities); and (7) some military activities. As discussed in the *Economic Impacts of Designation* section of this proposed rule and the draft Economic Report, the only entities identified as bearing economic impacts (above administrative costs) by the potential critical habitat designation are two developers of offshore wind energy projects; however, these entities exceed the criterion established by SBA for small businesses (Cardno 2017). Although considered unlikely (NMFS 2017a), there remains a small, unquantifiable possibility that Federally-managed longline boats (*i.e.*, deep-set or shallow-set fisheries) could be subject to additional conservation and management measures. At this time, however, NMFS has no information to suggest that additional measures are reasonably necessary to protect prey species. Chapter 13 of the draft Economic Report provides a description and estimate of the number of these entities that fit the criterion that could be impacted by the designation if future management measures were identified (Cardno 2017). Due to the inherent uncertainty involved in predicting

possible economic impacts that could result from future consultations, we acknowledge that other unidentified impacts may occur, and we invite public comment on those impacts.

In accordance with the requirements of the RFA, this analysis considered alternatives to the critical habitat designation for the MHI IFKW that would achieve the goals of designating critical habitat without unduly burdening small entities. The alternative of not designating critical habitat for the MHI IFKW was considered and rejected because such an approach does not meet our statutory requirements under the ESA. We also considered and rejected the alternative of designating as critical habitat all areas that contain at least one identified essential feature (*i.e.*, no areas excluded), because the alternative does not allow the agency to take into account circumstances where the benefits of exclusion for economic, national security, and other relevant impacts outweigh the benefits of critical habitat designation. Finally, through the ESA 4(b)(2) consideration process we also identified and selected an alternative that may lessen the impacts of the overall designation for certain entities, including small entities. Under this alternative, we considered excluding particular areas within the designated specific area based on economic and national security impacts. This selected alternative may help to reduce the indirect impact to small businesses that are economically involved with military activities or other activities that undergo section 7 consultation in these areas. However, as the costs resulting from critical habitat designation are primarily administrative and are borne mostly by the Federal agencies involved in consultation, there is insufficient information to monetize the costs and benefits of these exclusions at this time. We did not consider other economic or relevant exclusions from critical habitat

designation because our analyses identified only low-cost administrative impacts to Federal entities in other areas not proposed for exclusion. In summary, the primary benefit of this designation is to ensure that Federal agencies consult with NMFS whenever they take, fund, or authorize any action that might adversely affect MHI IFKW critical habitat. Costs associated with critical habitat are primarily administrative costs borne by the Federal agency taking the action. Our analysis has not identified any economic impacts to small businesses based on this designation and current information does not suggest that small businesses will be disproportionately affected by this designation (Cardno 2017). We solicit additional information regarding the impacts to small businesses that may result from this proposed designation, and we will consider any additional information received in developing our final determination to designate or exclude areas from critical habitat designation for the MHI IFKW.

During a formal Section 7 consultation under the ESA, NMFS, the action agency, and the third party applying for Federal funding or permitting (if applicable) communicate in an effort to minimize potential adverse effects to the species and to the proposed critical habitat. Communication between these parties may occur via written letters, phone calls, in-person meetings, or any combination of these. The duration and complexity of these communications depend on a number of variables, including the type of consultation, the species, the activity of concern, and the potential effects to the species and designated critical habitat associated with the activity that has been proposed. The third-party costs associated with these consultations include the administrative costs, such as the costs of time spent in meetings, preparing letters, and the development of research, including biological studies and engineering reports. There are no small

businesses directly regulated by this action and there are no additional costs to small businesses as a result of Section 7 consultations to consider.

Coastal Zone Management Act

Under section 307(c)(1)(A) of the Coastal Zone Management Act (CZMA) (16 USC § 1456(c)(1)(A)) and its implementing regulations, each Federal activity within or outside the coastal zone that has reasonably foreseeable effects on any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State coastal management programs. We have determined that this proposed designation of critical habitat for the MHI IFKW DPS is consistent to the maximum extent practicable with the enforceable policies of the approved Coastal Zone Management Program of Hawaii. This determination has been submitted to the Hawaii Coastal Zone Management Program for review.

Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, and other persons resulting from the collection of information by or for the Federal government. This proposed rule does not contain any new or revised collection of information. This rule, if adopted, would not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act, we make the following findings:

(A) This proposed rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, tribal governments, or the private sector and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” The designation of critical habitat does not impose an enforceable duty on non-Federal government entities or private parties. The only regulatory effect of a critical habitat designation is that Federal agencies must ensure that their actions are not likely to destroy or adversely modify critical habitat under ESA section 7. Non-Federal entities that receive funding, assistance, or permits from Federal agencies or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program; however, the Unfunded Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above to state governments.

(B) Due to the prohibition against take of the MHI IFKW both within and outside of the designated areas, we do not anticipate that this proposed rule will significantly or uniquely affect small governments. As such, a Small Government Agency Plan is not required.

Consultation and Coordination with Indian Tribal Governments

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the

United States towards Indian tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights.

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments,” outlines the responsibilities of the Federal government in matters affecting tribal interests. “Federally recognized tribe” means an Indian or Alaska Native tribe or community that is acknowledged as an Indian tribe under the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 479a). In the list published annually by the Secretary, there are no federally recognized tribes in the State of Hawaii (74 FR 40218; August 11, 2009). Although Native Hawaiian lands are not tribal lands for purposes of the requirements of the President’s Memorandum or the Department Manual, recent Department of Interior regulations (43 CFR 50) set forth a process for establishing formal government-to-government relationship with the Native Hawaiian Community. Moreover, we recognize that Native Hawaiian organizations have the potential to be impacted by Federal regulations and as such, consideration of these impacts may be evaluated as other relevant impacts from the designation. At this time, we are not aware of anticipated impacts resultant from the designation; however, we seek comments regarding areas of overlap that may warrant exclusion from critical habitat designation. We also seek information from affected Native Hawaiian organizations concerning other Native Hawaiian activities that may be affected.

Information Quality Act (IQA)

Pursuant to the Information Quality Act (section 515 of Public Law 106-554), this information product has undergone a pre-dissemination review by NMFS. The signed Pre-dissemination Review and Documentation Form is on file with the NMFS Pacific Islands Regional Office (see **FOR FURTHER INFORMATION CONTACT**).

List of Subjects

50 CFR Part 224

Endangered and threatened species, Exports, Imports, Transportation.

50 CFR Part 226

Endangered and threatened species.

Dated: October 31, 2017.

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For the reasons set out in the preamble, 50 CFR part 224 and 226 are proposed to be amended as follows:

PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES

1. The authority citation for part 224 continues to read as follows:

Authority: 16 U.S.C. 1531-1543 and 16 U.S.C. 1361 *et seq.*

2. In § 224.101, amend the table in paragraph (h) by adding a new citation under the critical habitat column, for the “Whale, false killer (Main Hawaiian Islands Insular DPS) under the “Marine Mammals” sub heading, to read as follows:

§ 224.101 Enumeration of endangered marine and anadromous species.

* * * * *

(h) The endangered species under the jurisdiction of the Secretary of Commerce are:

Species ¹			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Marine Mammals					
* * * * *					
Whale, false killer (Main Hawaiian Islands Insular DPS)	<i>Pseudorca crassidens</i>	False killer whales found from nearshore of the main Hawaiian Islands out to 140 km (approximately 75 nautical miles) and that permanently reside within this geographic range	77 FR 70915, Nov. 28, 2012	§226.226	NA
* * * * *					

¹Species includes taxonomic species, subspecies, distinct population segments (DPSs) (for a policy statement, see 61 FR 4722, February 7, 1996), and evolutionarily significant units (ESUs) (for a policy statement, see 56 FR 58612, November 20, 1991).

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Part 226 – DESIGNATED CRITICAL HABITAT

3. The authority citation of part 226 continues to read as follows:

Authority: 16 U.S.C. 1533.

4. Add §226.226, to read as follows:

§226.226 Critical habitat for the main Hawaiian Islands insular false killer whale (*Pseudorca crassidens*) Distinct Population Segment.

Critical habitat is designated for main Hawaiian Islands insular false killer whale as described in this section. The maps, clarified by the textual descriptions in this section, are the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat is designated in the waters surrounding the main Hawaiian Islands from the 45-m depth contour out to the 3,200-m depth contour as depicted in the maps below.

(b) *Essential Features.* The essential features for the conservation of the main Hawaiian Islands insular false killer whale are:

(1) Island-associated marine habitat for main Hawaiian Islands insular false killer whales.

(2) Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth.

(3) Waters free of pollutants of a type and amount harmful to main Hawaiian Islands insular false killer whales.

(4) Habitat free of anthropogenic noise that would significantly impair the value of the habitat for false killer whales' use or occupancy.

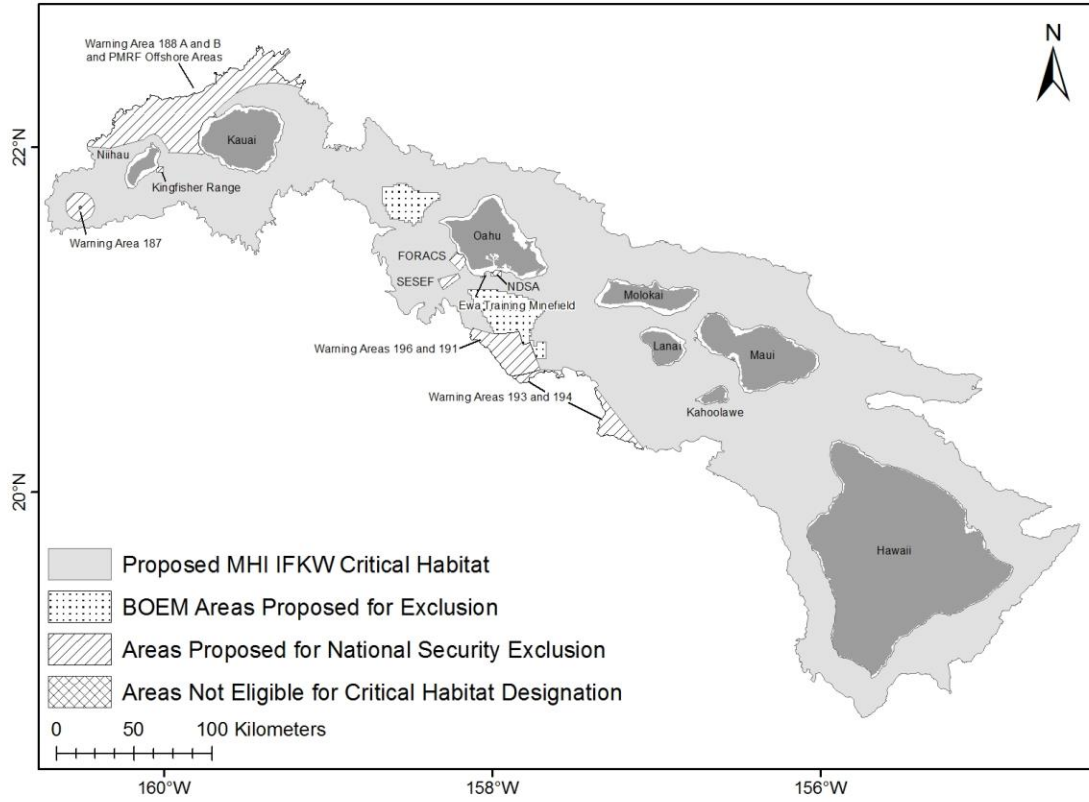
(c) *Areas not included in critical habitat.* Critical habitat does not include the following particular areas where they overlap with the areas described in paragraph (a) of this section:

(1) Pursuant to ESA section 4(b)(2) the following areas have been excluded from the designation: the Bureau of Ocean Energy Management's Call Area offshore of the Island of Oahu (which includes two sites, one off of Kaena point and one off the south shore - see BOEM Lease Areas in maps); the Pacific Missile Range Facilities Offshore ranges (including the Shallow Water Training Range, the Barking Sands Tactical Underwater Range, and the Barking Sands Underwater Range Extension); the Kingfisher Range; Warning Area 188; Kaula and Warning Area 187; Fleet Operational Readiness Accuracy Check Site Range; the Shipboard Electronic Systems Evaluation Facility; Warning Areas 196 and 191; and Warning Areas 193 and 194.

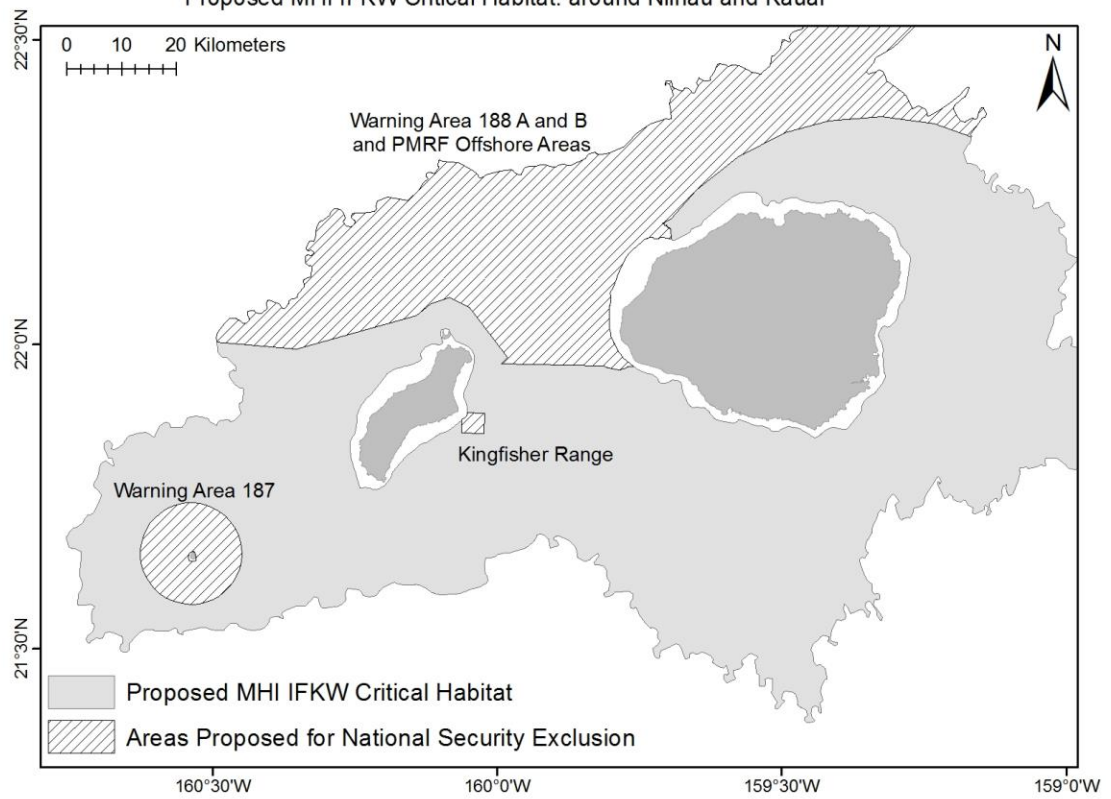
(2) Pursuant to ESA section 4(a)(3)(B) all areas subject to the Joint Base Pearl Harbor-Hickam Integrated Natural Resource Management Plan.

(d) *Maps of main Hawaiian Islands insular false killer whale critical habitat.*

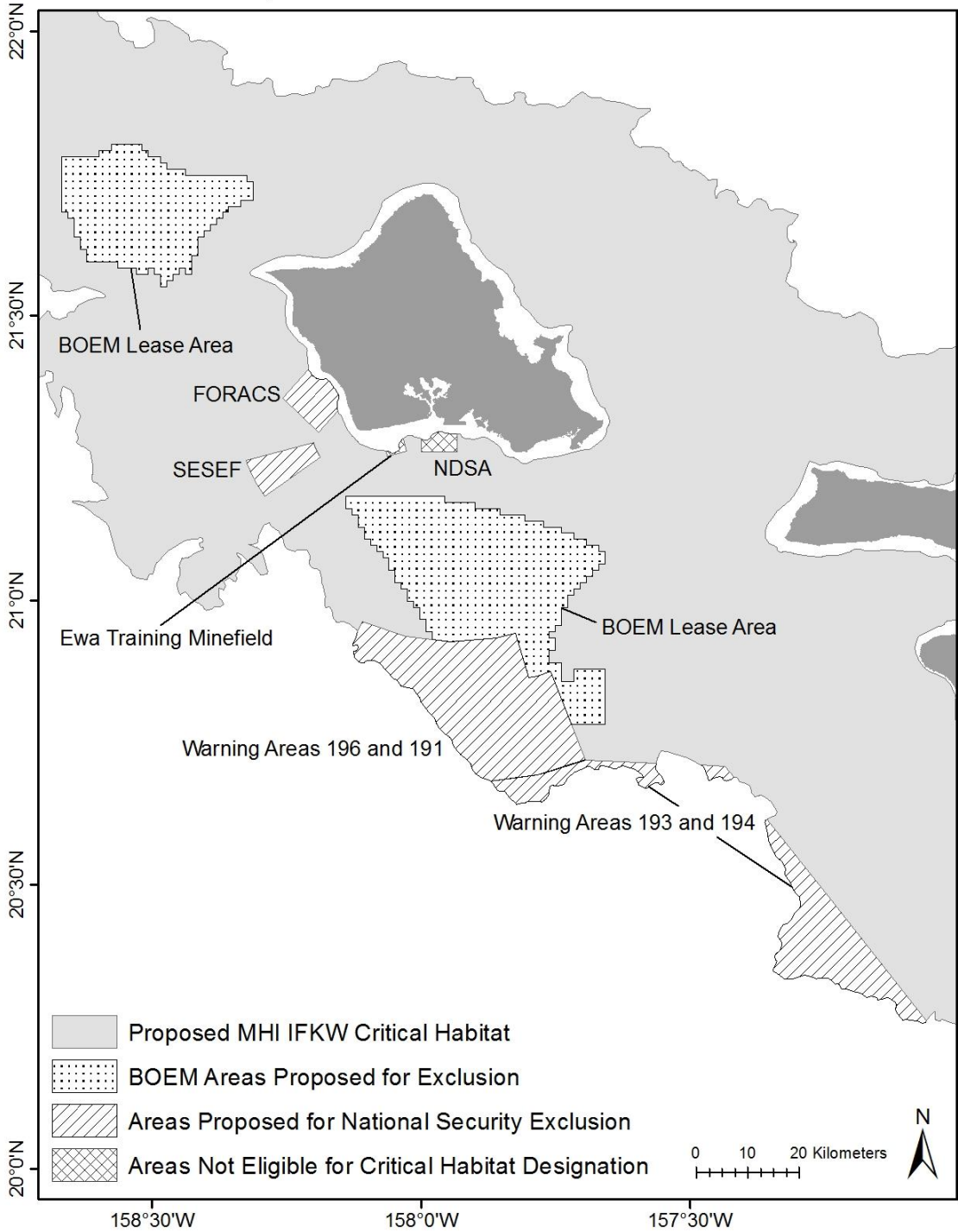
Proposed MHI IFKW Critical Habitat



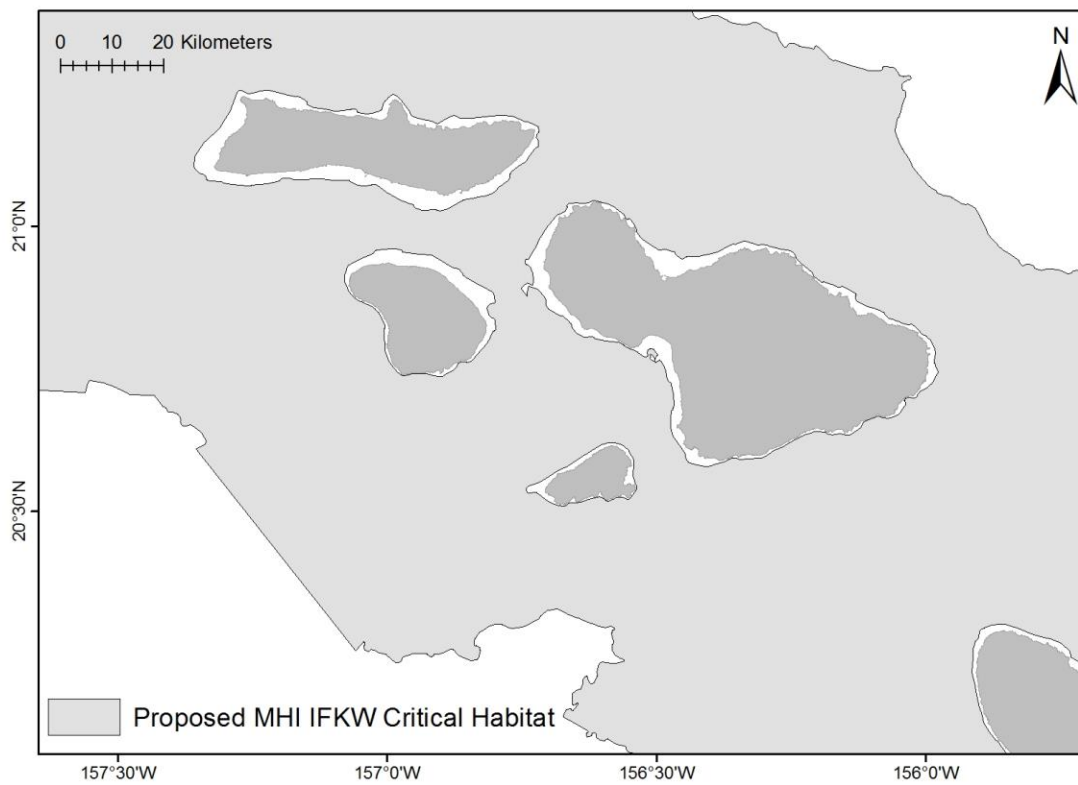
Proposed MHI IFKW Critical Habitat: around Niihau and Kauai



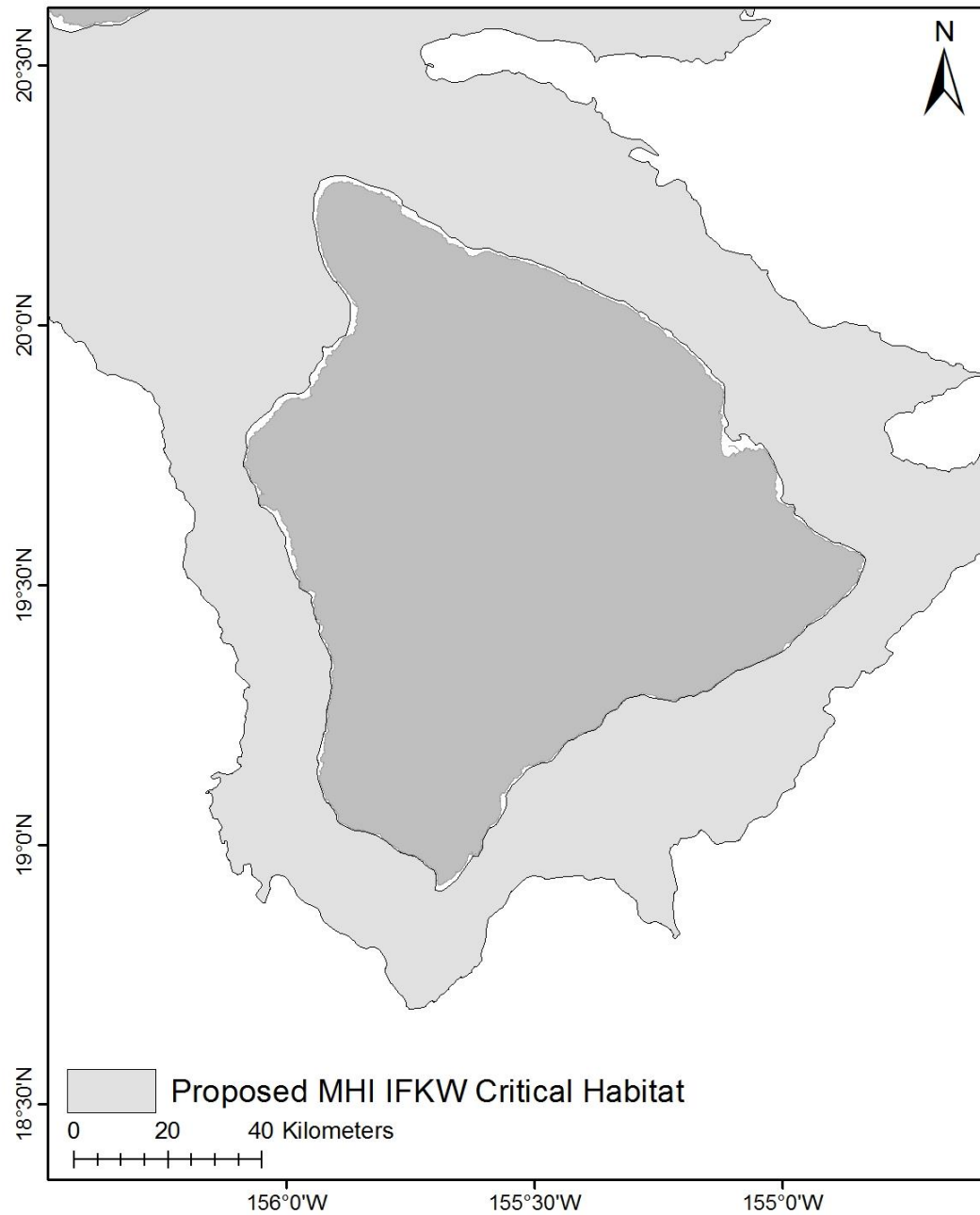
Proposed MHI IFKW Critical Habitat: around Oahu



Proposed MHI IFKW Critical Habitat: around Maui, Molokai, Lanai, and Kahoolawe



Proposed MHI IFKW Critical Habitat: around Hawaii Island



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